

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Implementation of the Local Competition)	CC Docket No. 96-98
Provisions in the Telecommunications Act)	
of 1996)	

**COMMENTS OF GTE SERVICE CORPORATION AND ITS
AFFILIATED DOMESTIC TELEPHONE OPERATING COMPANIES IN RESPONSE
TO SECOND FURTHER NOTICE OF PROPOSED RULEMAKING**

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SECOND FURTHER NOTICE OF PROPOSED RULEMAKING**

GTE Service Corporation and its affiliated domestic telephone operating companies¹
(collectively AGTE≡) respectfully submit their Comments in the above-captioned docket.

¹ GTE Alaska Incorporated, GTE Arkansas Incorporated, GTE California Incorporated, GTE Florida Incorporated, GTE Hawaiian Telephone Company Incorporated, The Micronesian Telecommunications Corporation, GTE Midwest Incorporated, GTE North Incorporated, GTE Northwest Incorporated, GTE South Incorporated, GTE Southwest Incorporated, Contel of Minnesota, Inc., GTE West Coast Incorporated, and Contel of the South, Inc.

In the three years since the Telecommunications Act was passed, CLECs have raised \$15-20 billion in capital that they have used to deploy hundreds of switches, thousands of miles of fiber for interoffice transport and local access, and facilities to provide every type of broadband service.² GTE=s unique experience as an ILEC serving widely dispersed territories both large and small confirms that these investments are being made in every kind of market -- from Los Angeles to Oxford Junction, Iowa. These CLECs are already earning billions of dollars in revenues and, just with the facilities in place today, are poised to reach a significant percentage of the business *and* residential customers in every type of GTE market. Congress=s pro-competitive vision for the local marketplace is rapidly becoming a reality. This proceeding offers the Commission the choice between ensuring that the pace of competition continues to grow or derailing the competitive process by destroying incentives for ILECs and CLECs alike to invest in new facilities.

² See Comments of Association for Local Telecommunications Services, CC Docket No. 98-146, at 9 (filed Sept. 16, 1998). This figure does not include AT&T=s \$90 billion investment in cable-based local telephony. See Peter W. Huber & Evan T. Leo, UNE Fact Report III-19 (submitted by USTA on behalf of Ameritech, Bell Atlantic, BellSouth, GTE, SBC and U S WEST) (AUNE Fact Report=).

INTRODUCTION AND SUMMARY

In *AT&T v. Iowa Utilities Board*, 119 S. Ct. 721 (1999), the Supreme Court vacated in its entirety the Commission's original unbundling rule, 47 C.F.R. § 51.319. The Court directed the Commission to go back to the drawing board and formulate new substantive standards for the "necessary" and "impair" requirements of section 251(d)(2) that will give those terms meaningful content consistent with the pro-competition purpose of the Telecommunications Act.

The Court held that the Commission's original Rule 319 was invalid because (1) the rule failed to take account of the availability of elements outside the incumbent's network, (2) the Commission had improperly assumed that any increase in cost (or decrease in quality) imposed by denial of a network element requires the element to be unbundled, and (3) the original rule was based on the erroneous presumption that all network elements that could feasibly be unbundled should be unbundled under section 251(d)(2). *Iowa Utils. Bd.*, 119 S. Ct. at 735-36. The Court instructed the Commission to start over on remand and determine on a rational basis which network elements must be made available, taking into account the objectives of the Act and giving some substance to the "necessary" and "impair" requirements. *Id.* at 736.

To fulfill the Court's mandate and give rational content to the terms of the Telecommunications Act, the Commission's unbundling standards must promote competition, which is the objective of section 251, and not merely the interests of would-be competitors. True competition depends upon innovation, and a reasonable unbundling rule will stimulate rather than stifle the incentives of CLECs and ILECs to invest in new facilities. As explained by Justice Breyer in his concurrence joining in and fleshing out the Court's "necessary and impair" holding, the Act

requires the Commission to provide Aa *convincing explanation* of why facilities should be shared (or >unbundled=) where a new entrant could *compete effectively* without the facility, or where *practical alternatives* to the facility are available.≡ *Id.* at 753 (emphases added). AIncreased sharing, by itself, does not automatically mean increased competition. It is in the *unshared*, not the *shared*, portions of the enterprise that meaningful competition would likely emerge.≡ *Id.* at 754 (emphasis in original).

In light of these principles, GTE urges the Commission to adopt the following standards for implementing section 251(d)(2)=s unbundling requirements:

First, before any element is required to be unbundled, it must meet the Aimpair≡ test. Drawing upon firmly established principles of competition law, the Commission should rule that Athe failure to provide access≡ to any particular network element would Aimpair≡ CLECs= ability to provide service within the meaning of section 251(d)(2)(B) ***only where the element is essential to competition and there is convincing evidence that CLECs cannot effectively compete using substitutes for the element available from alternative sources.***

This test should not turn on an element-to-element cost comparison or any hypothetical model, but rather on the wealth of actual market evidence now available to the Commission concerning the availability of substitute facilities and the ability of CLECs to compete using those substitutes. The Aconvincing evidence≡ standard of proof is necessary to avoid overbroad or presumptive unbundling requirements that could diminish current facilities-based competition or impair existing incentives to invest in alternative facilities, and it is appropriate to place the burden of proof in this proceeding on CLECs who seek unbundled access, since they are uniquely well positioned to produce the relevant market evidence the Commission must consider. Furthermore,

under well-accepted competition law principles, application of the standard to particular elements must be tailored to accommodate differences in the relevant geographic markets for each network element. For these reasons, it is not appropriate to adopt a presumptive list of UNEs and put the burden on ILECs to prove the availability of substitutes in particular areas, nor may the Commission adopt a single Aone size fits all≡ national unbundling requirement that ignores relevant market differences.

Second, even where a network element satisfies the threshold Aimpair≡ standard (which is the prerequisite for any unbundling obligation), the Commission should rule that access to a feature, function or capability of the element that is Aproprietary≡ in nature is not Anecessary≡ within the meaning of section 251(d)(2)(A) ***unless the proprietary feature, function or capability is integral to the operation of the element such that CLECs cannot make use of the element without such access.*** This approach reflects the fact that few, if any, network elements are likely to be *entirely* proprietary in nature. Of course, if the Commission were to determine that the particular proprietary feature, function or capability in question itself constituted an entirely separate network element (as contemplated by the definition of Anetwork element≡ in 47 U.S.C. § 153(29)) and that this separate element in its own right was essential to competition and met the Aimpair≡ test, such an element would almost certainly also meet the Anecessary≡ test because the proprietary aspect would be inseparable from the entire element.

In any event, regardless of whether the Commission adopts the particular articulation of the Anecessary≡ and Aimpair≡ standards proposed by GTE, the Commission=s unbundling rule must take account of the explosion of investment in CLEC facilities that has occurred in the three years

since the Commission last considered Rule 319. Whatever predictive judgments might have been made three years ago about the prospects for the development of facilities-based competition, those predictive judgments are now trumped by actual market experience. Clearly the Commission has the power to require CLECs to identify the facilities they use and the alternative facilities available to them from equipment vendors or other carriers. Any new unbundling rule unsupported by a systematic examination of such substitutes cannot pass muster under *Iowa Utilities Board*.

As we detail below in sections II-IV of these comments and in the accompanying appendices, since the passage of the Act, CLECs throughout the United States have deployed several hundred switches, laid thousands of miles of fiber for interoffice transport and local loops, and deployed myriad other competitive local exchange facilities. These investments have been made largely because the Commission's UNE platform and recombination requirements have been stayed by the Eighth Circuit and because there has been uncertainty over whether ILECs will be required to provide elements at TELRIC prices. Competitive facilities, moreover, are found in markets of all sizes throughout GTE's local service territories. CLECs continue to announce further plans to deploy local exchange facilities in new markets on an almost daily basis and have no difficulty attracting capital to fund such strategies.

Since 1996, the number of CLECs has grown to more than 1000 -- an increase of 425 percent -- and these CLECs are experiencing rapid revenue growth. *See* Report of Network Engineering Consultants, Inc. at 1 & Exhibit A (ANECI Report) (filed herewith as Appendix B). To take one representative example, facilities-based Intermedia Communications saw its revenue grow from \$38.6 million in 1995 to \$712.8 million in 1998 -- an increase of over 1700 percent. *Id.* at 23. Moreover, in the last three years, these CLECs have rapidly deployed facilities in markets across the country.

Before the Act was passed, CLECs operated only 65 switches. UNE Fact Report at I-1.³ Since 1996, however, CLECs have deployed more than 600 new switches of their own. *Id.* Indeed, by March 1999, 167 different CLECs had deployed switches in 320 cities. *Id.* Likewise, since 1996, the number of CLECs that have deployed fiber networks has grown from 29 to 60 and the number of metropolitan areas served by this fiber has increased from 130 to 289. *Id.* at II-6. Within the top 50 MSAs competitors have deployed over 30,000 miles of fiber. *Id.* And in the MSAs ranked between 51 and 150, CLECs have deployed fiber in all but 15. *Id.* Sections III-IV of these comments systematically discuss the findings of the UNE Fact Report and the NECI Report with respect to individual network elements.

In addition, GTE has also commissioned PNR & Associates to conduct an in-depth examination of facilities-based competition in eight GTE markets of various sizes that are representative of GTE's local service territories -- Los Angeles; Dallas; Tampa; Fort Wayne, Indiana; Lexington, Kentucky; Myrtle Beach, South Carolina; Oxford Junction, Iowa; and LaBelle/Ewing/Lewistown, Missouri. *See* Report of PNR & Associates, Inc. (APNR Report) (filed herewith as Appendix D). PNR has identified 26 separate facilities-based CLECs that are operating in these markets -- 17 in Los Angeles, 11 in Dallas, eight in Tampa, two in Fort Wayne, two in Lexington, and one each in the remaining small and rural markets. *Id.* at 10. The following chart lists these CLECs and identifies the network elements they are self-providing or acquiring from alternative wholesale suppliers:

³ To avoid unnecessary duplication and multiple filings, the UNE Fact Report is being filed by the USTA on behalf of all sponsoring companies. We ask the Commission to treat the Report as if it were filed as an appendix to GTE's comments.

CLECs OPERATING IN EIGHT GTE MARKETS						
CLEC	Switching	Transport	Loops/NID	OSS	SS7	OS/DA
Allegiance	T	T	*	T	T	*
AT&T	T	T	T	T	T	T
Cox Calif. Telecom	T	T	T			*
e.spire	T	T	T	T	T	*
Focal Comms.	T	*	*			
Frontier	T	T	T	T	T	T
GST	T	T	T		T	*
HTC Comms.	T	T	T	T	T	T
Hyperion	T	T	T			
ICG Communications	T	T	T	T	*	*
Intermedia	T	T	*	T	*	*
KMC Telecom	T	T	T			
Level 3	T	T	*			

CLECs OPERATING IN EIGHT GTE MARKETS						
CLEC	Switching	Transport	Loops/NID	OSS	SS7	OS/DA
Lost Nation-Elwood	T	T	T	T	T	T
Mark Twain Comms.	T	T	T	T	T	T
MCI WorldCom	T	T	T	T	T	T
MGC Comms.	T	T	*			
MediaOne	T	T	T			
NextLink	T	T	T	T	*	*
PacBell CLEC	T	T	*	T	T	T
SBC	T	T	*	T	T	T
Teligent	T	T	T	T	*	T
Time Warner Telecom	T	T	T			T
US LEC	T	T	*		T	
USXCHANGE	T	T	*	T		
WinStar	T	T	T	T	*	*

CLECs OPERATING IN EIGHT GTE MARKETS						
CLEC	Switching	Transport	Loops/NID	OSS	SS7	OS/DA
T- CLEC self-provides element in some or all markets. * - CLEC leases element from ILEC or non-ILEC source. Blank - information not available.						

The PNR Report also summarizes in depth the current and prospective business cases of each of these CLECs based on the best available information. The PNR Report shows that these CLECs have raised tremendous amounts of capital investment, in some cases more than \$2 billion, and all have aggressive plans to expand their offerings on a broad scale without extensive dependence on GTE=s unbundled network elements. The PNR Report also includes detailed maps of each of the eight focus markets that depict the locations of the switches and fiber facilities deployed by these CLECs. The three Dallas maps that follow this page are representative of the maps included in the PNR Report. These maps show that the 26 CLECs listed above operate switching and fiber facilities that are perfectly poised to reach the bulk of GTE=s customers in each of these markets. As explained by PNR, the Addressable market that could be served by the competitive facilities in place *today* in these areas encompasses virtually all of GTE=s high-value customers and, in some instances, virtually *all of GTE=s customers, period*. In the Dallas/Fort Worth area, for example, *over 97 percent of all of GTE=s customers*, including both business and residential customers, are within 1,000 feet of a CLEC=s fiber, and fully *91 percent* of all of GTE=s business and residential customers are within 18,000 feet of a CLEC=s switch. PNR Report at DFW Metroplex 4.

Recognizing the widespread availability of substitute elements actually used by CLECs in the market today, and based on a proper solicitude for the investment incentives of CLECs and ILECs alike, the Commission, in our view, should take the following actions with respect to particular elements:

Switching, OS/DA Signaling and NIDs: These elements should not be subject to unbundling. CLECs have demonstrated an ability to deploy fully scalable switches in markets of all sizes throughout the country. OS/DA, signaling, and NIDs are available from competitive providers on a national basis.

Interoffice Transport: ILECs should not be required to unbundle transport to or from wire centers that serve 15,000 or more lines. In GTE=s service territories, wire centers of this size have the greatest incidence of collocation, and collocation correlates almost perfectly with the use of transport alternatives by CLECs.

Loops: ILECs should not be required to unbundle local loops used to serve business customers with 20 or more access lines or multiple dwelling unit complexes (AMDUs≡). Numerous CLECs are successfully serving these customers with their own loop facilities. Nor should ILECs be required to unbundle loops serving new residential or commercial developments that are installed after the effective date of the rules adopted in this proceeding. ILECs have no advantage over CLECs in deploying such new facilities.

OSS: ILECs should be required to unbundle OSS only where CLECs use the OSS in conjunction with another service or element of the ILEC.

Additional Network Elements: There is no basis for requiring unbundling of the additional elements cited in the present *Notice of Proposed Rulemaking*.⁴ Some of them, such as inside wiring and dark fiber, are not network elements, and all of them are widely available in the marketplace from alternative sources and therefore do not meet the impair test.

Finally, whatever unbundling requirements the Commission adopts, it is imperative that these requirements sunset within a reasonable period of time, such as two years. Given the extraordinary dynamism and technological evolution of the telecommunications marketplace, it is a near certainty

⁴ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, Second Further Notice of Proposed Rulemaking (Apr. 16, 1999).

that elements that may now be appropriate candidates for unbundling will not be proper candidates in the near future. The Commission needs to monitor these developments and periodically reassess its unbundling obligations to ensure that they continue to satisfy the requirements established by section 251(d)(2) and serve the Act's procompetitive purpose.

For the convenience of the Commission, we are submitting at the end of these comments GTE's proposed rules for implementing the unbundling standards of section 251(d)(2).

DISCUSSION

I. THE LEGAL AND ECONOMIC STANDARDS THAT GOVERN UNBUNDLING OBLIGATIONS UNDER SECTION 251(d)(2).

Section 251(d)(2) provides that in determining what network elements should be made available under the Act's unbundling requirement, the Commission shall consider, at a minimum, whether --

- (A) access to such network elements as are proprietary in nature is necessary; and
- (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

Although the necessary standard of section 251(d)(2)(A) applies only to proprietary elements, the language of the Act makes it clear that all elements, proprietary or not, must meet the impair test of section 251(d)(2)(B) before the Commission may compel their unbundling. The phrase such network elements in section 251(d)(2)(B) plainly refers back to the general antecedent phrase what network elements should be made available in the opening sentence of section

251(d)(2). The statute thus requires application of the Aimpair \equiv test generally to all elements to be unbundled.

Since all network elements must first meet the threshold Aimpair \equiv test before the Commission can require them to be unbundled, and since the Anecessary \equiv test applies only to the subset of elements that involves a Aproproprietary \equiv feature or functionality, we will first address the legal and economic principles that we believe govern the Aimpair \equiv standard before turning to the substance of the Anecessary \equiv test. We will then address various other questions and points raised by the Commission=s *Notice of Proposed Rulemaking*.

A. The Supreme Court Instructed the Commission To Develop Unbundling Standards Informed By the Act=s Purpose of Promoting Competition; Only Standards That Preserve Incentives To Invest in Competitive Facilities Meet That Objective.

The Supreme Court vacated the Commission=s original unbundling rule after concluding that its requirement that ILECs unbundle every network element -- regardless of whether substitutes were available in the marketplace -- was Asimply not in accord with the ordinary and fair meaning \equiv of the Act. *Iowa Utils. Bd.*, 119 S. Ct. at 735.

In his opinion for the Court, Justice Scalia identified three specific deficiencies in the Commission=s approach. *First*, contrary to the command of section 251(d)(2), the Commission had Ablind[ed] itself to the availability of elements outside the incumbent=s network. \equiv *Id.* The Court held that *Athat failing alone would require the Commission=s rule to be set aside. \equiv Id.* (emphasis added). *Second*, the Commission had improperly assumed that Aany increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element >necessary,= and

causes the failure to provide that element to >impair= the entrant=s ability to furnish its desired services.≡ *Id.* *Third*, the Commission had improperly avoided making a substantive judgment about which network elements did or did not meet the Anecessary≡ and Aimpair≡ tests by presuming, contrary to the terms of the Act, that all elements that could feasibly be unbundled should be unbundled under section 251(d)(2). *Id.* at 736. The Court thus rejected Rule 319's premise of Ablanket access to incumbents= networks≡ and instructed the Commission on remand to Adetermine on a rational basis which network elements must be made available≡ and, specifically, to base this determination on Athe objectives of the Act.≡ *Id.* at 735-36.

It is undisputed that the objective of section 251 is to promote competition. The part of the Act giving the Commission authority to establish ILEC unbundling obligations is entitled ADevelopment of Competitive Markets.≡⁵ The Act=s preamble expressly states that its purpose is to Aaccelerate rapidly private sector deployment of advanced telecommunication and information technologies . . . by opening all telecommunications markets to competition.≡ Pub. L. No. 104-104, 110 Stat. 56 (1996); H.R. Conf. Rep. No. 104-458, at 1 (1996). Similarly, the Supreme Court recognized that Congress sought, through the Act, to create Acompetition among multiple providers of local service.≡ 119 S. Ct. at 726. And the Commission=s present *Notice of Proposed Rulemaking* acknowledges that the Act=s unbundling requirements are designed Ato achiev[e] Congress=

⁵ Title of Part II of the Act, which includes section 251(d)(2); see *Brotherhood of R.R. Trainmen v. Baltimore & Ohio R.R.*, 331 U.S. 519, 528-29 (1947) (title of statute is a relevant interpretative tool).

objective of promoting rapid competition in the local communications market.≡ *Second Further Notice of Proposed Rulemaking* & 2.⁶

Congress=s express preference for the Adeployment≡ by competitors of new Atechnologies≡ underscores the fact that genuine innovation in telecommunications markets depends on the ownership of facilities and thus on *facilities-based* competition, as opposed to mere resale. If the incumbent achieved its position because it owns a unique facility or input critical to the provision of its service, competitors have a strong incentive to improve upon that input or find a way to provide the service with an alternative input. Making these investments gives competitors an opportunity to attract the incumbent=s customers by providing better service at a lower price. This development provokes the incumbent to respond in kind, making its own investments to improve upon the service of its competitors. As Professor Kahn states, the Amost creative and productive form of competition is innovation -- in the methods of producing and supplying existing products and services and in developing new product and service offerings.≡ Declaration of Alfred E. Kahn at 4 (emphasis added) (filed herewith as Appendix A) (AKahn Declaration≡).

⁶ See also *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, at & 1 (1996) (A*First Report and Order*≡) (the Act=s Anew regulatory regime≡ requires the Commission to Aaffirmatively promote efficient competition≡).

B. Relevant Competition Law Principles Dictate that an Element Will Meet the AImpair≡ Test Only If It Is Essential to Competition and There Is Convincing Evidence That CLECs Cannot Effectively Compete Using Substitutes for the Element.

Congress=s stated objective in section 251 of fostering competition should be interpreted in light of the pre-existing body of law embodying the Nation=s competition policy -- federal antitrust law. It is well settled that Congress is Apresumed to intend≡ the Ajudicially settled meaning≡ of terms or concepts used in a statute,⁷ and that any reasonable method of statutory construction Amust take into account≡ the Acontemporary legal context≡ in which a statute is enacted.⁸ Here, the relevant Alegal context≡ is contemporary antitrust law.

Within the body of federal competition law, the Aessential facilities≡ doctrine is the only relevant line of authority analogous to section 251(d)(2) under which an incumbent firm can be compelled to share its facilities with competitors. The legislative history of the Act, moreover, clearly

⁷ *American Nat=l Red Cross v. S.G. & A.E.*, 505 U.S. 247, 252 (1992); *see also Traynor v. Turnage*, 485 U.S. 535, 546 (1988); *Director, Office of Workers Compensation Programs v. Perini North River Assoc.*, 459 U.S. 297, 319-20 (1983) (same).

⁸ *Cannon v. University of Chicago*, 441 U.S. 677, 698-99 (1979); *see also id.* at 699 (Court presumes Athat Congress was thoroughly familiar with . . . important precedents from [the Supreme Court] and other federal courts and that it expected its enactment to be interpreted in conformity with them≡); *Morse v. Republican Party of Va.*, 517 U.S. 186, 230-31 (1996) (interpreter of statute must look to A>backdrop= of decisions≡ against which ACongress acted≡).

reveals Congress=s reliance on essential facilities principles in adopting the unbundling requirement.

See H.R. Rep. No. 104-204, at 49 (1995) (AIn the overwhelming majority of markets today, because of their government-sanctioned-monopoly status, local providers maintain *bottleneck* control over the *essential facilities* needed for the provision of local telephone service The inability of other service providers to gain access to the local telephone companies[>] equipment inhibits competition that could otherwise develop in the local exchange market.≡) (emphasis added)).

Consistent with the pro-competition policies of the antitrust laws generally, the essential facilities doctrine places significant limits on the ability of firms to gain compelled access to a competitor=s facilities. The doctrine will compel the sharing of a facility only if, among other things: (i) the facility is essential to competition and (ii) the facility is not practically or reasonably available from another source. *See* 3A Philip E. Areeda & Herbert Hovenkamp, ANTITRUST LAW 202 (1996) (AAreeda & Hovenkamp, ANTITRUST LAW≡) (AThe term >essential= in the essential facilities context refers to two different things, both of which must be established. First, the claimed input must be essential to the plaintiff=s survival in the market. Second, the claimed input must not be available from another source or capable of being duplicated by the plaintiff or others.≡); Philip E. Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 852 (1989) (facility is Aessential≡ only when access to it is Acritical to the [competitor=s] competitive vitality,≡ which Ameans that the [competitor] cannot compete effectively without it and that duplication or practical alternatives are not available≡).⁹

⁹ We do not mean to suggest that the Act requires the Commission to apply every aspect of the judicially developed essential facilities doctrine. For example, one element of an essential facilities

claim under § 2 of the Sherman Act is exclusionary conduct, including an unreasonable denial of the use of the facility. *See, e.g. Caribbean Broadcasting System v. Cable & Wireless, PLC*, 148 F.3d 1080, 1088 (D.C. Cir. 1998); *MCI Comms. Corp. v. AT&T*, 708 F.2d 1081, 1132-33 (7th Cir. 1983). By imposing a statutory unbundling obligation in section 251, the Act obviates any need for the Commission to apply this exclusionary conduct element of the essentials facilities doctrine.

Competition law limits the compelled sharing of facilities to this narrow set of circumstances because, as recognized by leading economists and antitrust commentators like Professors Kahn and Areeda, as well as by Justice Breyer in his concurrence in *Iowa Utilities Board*, sharing requirements significantly diminish the incentives for both competitors and incumbents to innovate through investment in their own facilities.¹⁰ Since it is risky for CLECs to deploy their own substitute network elements, the safe and easy course, from the perspective of a new entrant, is to avoid that risk by relying entirely on ILEC elements. This inclination to free ride is compounded if these elements are made available -- as they would be under the Commission's existing rules -- on a recombined basis at TELRIC prices that purport to reflect the most efficient possible network.¹¹ Thus, as Professor Kahn concludes, "the obligation to share whatever elements competitors demand, coupled with the Commission's prescription of a price purportedly equal to the minimum

¹⁰ See *Iowa Utils. Bd.*, 119 S. Ct. at 753 (Breyer, J., concurring in relevant part) ("Increased sharing, by itself, does not mean increased competition. It is in the *unshared*, not the *shared*, portions of the enterprise that meaningful competition would likely emerge") (emphasis in original); Kahn Declaration at 4 (because "competition and innovation themselves consist in a quest for differential advantage, a requirement that the benefits be shared, on regulatorily dictated terms, in the cases in which that quest has been successful would interfere with the competitive process itself"); Areeda & Hovenkamp, *ANTITRUST LAW* at 174 ("the right to share a monopoly discourages firms from developing their own alternative inputs"); David S. Evans & Richard Schmalensee, *Economic Aspects of Payment Card Systems and Antitrust Policy Toward Joint Ventures*, 63 *ANTITRUST L.J.* 861, 878 (1995) ("[I]t makes economic sense to require a firm to share its property only when that property [is] a natural monopoly or bottleneck facility that is essential for competing firms to participate effectively in the market. Even in that situation we need to take very seriously the adverse effects of compulsory sharing on incentives to invest and innovate in both the affected market and throughout the economy. If other firms could have developed, or could still develop, similar property, . . . the firm in question should not be required to share its property").

¹¹ See Areeda & Hovenkamp, *ANTITRUST LAW* at 175 ("If the court goes the second step, ordering the defendant to provide the facility and regulating the price to competitive levels, then the plaintiff's incentive to build an alternative facility is destroyed altogether").

costs that would be incurred by an efficient supplier,≡ A completes the process of *destroying the incentive to innovate*.≡ Kahn Declaration at 16 (emphasis in original).

Imposing mandatory sharing requirements when substitutes are available also undermines the investment incentives of existing players in the market. CLECs who have *already* deployed their own facilities will be severely hampered in their ability to compete if other CLECs can secure the same facilities from the ILEC at lower regulated prices. Because a sharing requirement will lower the returns these firms reasonably expected to receive on their investments, their incentive to continue to invest in competitive facilities would be severely diminished.¹² Likewise, ILECs will have diminished incentives to invest in upgrading and improving their own facilities because any such gains would have to be shared with competitors. As Justice Breyer recognized in his concurrence, Aa sharing requirement may diminish the original owner=s incentive to keep up or improve the property

¹² Kahn Declaration at 8 (overbroad sharing requirements risk A discourage new, risky investment≡ by A existing facilities-based CLECs, which have already invested billions of dollars of their own capital in challenging the historical monopolists and are investing more each year≡) (emphasis in original).

by depriving the owner of the fruits of value-creating investment, research, or labor.≡ *Iowa Utils. Bd.*, 119 S. Ct. at 753 (Breyer, J.).¹³

¹³ See also 119 S. Ct. at 753 (A No one can guarantee that firms will undertake the investment necessary to produce complex technological innovations knowing that any competitive advantage deriving from those innovations will be dissipated by the sharing requirement.≡); Kahn Declaration at 16-17 (A The notion that the ILECs are likely to find it profitable to engage in such unprecedentedly risky investments as they now contemplate . . . under a regulatory regime that requires them immediately to share those facilities with any and all competitors who ask for them -- competitors who are subject to no such obligation -- at prices based on the Commission=s, hypothetical, most-efficient-firm cost standard.≡).

Unbundling rules that require facilities to be shared when substitutes are available in the marketplace cannot be squared with the limiting language of section 251(d)(2) or the Act's objective of promoting competition. The very real dangers to investment incentives posed by overbroad unbundling, according to Justice Breyer, necessarily impose corresponding limits upon the FCC's power to compel unbundling that are closely related, if not identical, to those applicable under the essential facilities doctrine. *Id.* Section 251(d)(2)'s impair test therefore requires the Commission to articulate, in Justice Breyer's words, *Aa convincing explanation* of why facilities should be shared (or >unbundled=) where a new entrant could *compete effectively* without the facility, or where *practical alternatives* to the facility are available. *Id.* (emphases added). This requirement is based on the recognition that A[r]egulatory rules that go too far, expanding the definition of what must be shared beyond that which is *essential* to that which merely proves

advantageous to a single competitor, risk costs that, in terms of the Act's objectives, may make the game not worth the candle.≡ *Id.* at 754 (emphasis added).¹⁴

¹⁴ We recognize that the Supreme Court majority did not decide whether, Aas a matter of law,≡ the Commission must strictly apply the essential facilities standard. *Iowa Utils. Bd.*, 119 S. Ct. at 734. A[I]t may be,≡ the Court stated, Athat some other standard would provide an equivalent or better criterion for the limitation upon network-element availability that the statute has in mind.≡ *Id.* Our point is that, because the compelled unbundling of network elements under the Act is *no different in substance from, and creates the same significant risks as*, the compelled sharing of a competitor's facilities under the essential facilities doctrine, the Commission's application of the Aimpair≡ standard should be informed by the core principles of that doctrine. But regardless of the label used, any reasonable standard for the Alimitation upon network-element availability that the statute has in mind≡ must take account of the availability of substitute elements in the marketplace and must focus on whether CLECs can effectively compete without access to the ILEC's facility. That conclusion is compelled by the Court's holding that section 251(d)(2) is not satisfied merely by a showing that without access to the ILEC facility, CLECs will experience higher costs or lower service quality. *See id.* at 735 n.11.

It is precisely because of the risk that competitive innovation will be stifled that competition law mandates the strictest limits on any compelled sharing of facilities. A compulsory access, if it exists at all, is and should be very exceptional.¹⁵ Areeda, *Essential Facilities*, 58 ANTITRUST L.J. at 852 (cited in *Iowa Utils. Bd.*, 119 S. Ct. at 753 (Breyer, J.)).¹⁵ Consistent with these limitations, the Commission cannot (as is contemplated by the *Notice of Proposed Rulemaking*) adopt a presumptive list of UNEs and put the burden on ILECs to prove the availability of substitutes in particular areas. Rather, the burden must be on those seeking compelled unbundling to show by convincing evidence that CLECs cannot compete effectively using substitutes available from alternative sources in the marketplace. Indeed, it is particularly appropriate to place the burden of proof on CLECs, because they are the parties uniquely situated -- by virtue of their position as purchasers of alternative facilities and wholesale capacity -- to know the most detailed information about the market availability of effective substitutes.

The Commission, moreover, plainly has the investigatory tools at its disposal to require CLECs to provide all the information it needs to assess comprehensively the availability of alternative facilities. A failure to do so will obviously run afoul of the Supreme Court's mandate, which expressly required the Commission to evaluate the availability of the elements outside the incumbent's network.¹⁵ *Iowa Utils. Bd.*, 119 S. Ct. at 736.

¹⁵ This principle is universally reflected in essential facilities cases. See, e.g., *Caribbean Broad. Sys.*, 148 F.3d at 1088; *City of Anaheim v. Southern Cal. Edison Co.*, 955 F.2d 1373, 1381 (9th Cir. 1992); *City of Chanute v. Williams Nat. Gas Co.*, 955 F.2d 641, 648 (10th Cir. 1992); *Twin Labs, Inc. v. Wieder Health & Fitness*, 900 F.2d 566, 570 (2d Cir. 1990).

Accordingly, following these governing principles, the Commission should rule that Athe failure to provide access≡ to any particular network element would Aimpair≡ CLECs= ability to provide service within the meaning of section 251(d)(2)(B) *only where the element in question is essential to competition and there is convincing evidence that CLECs cannot effectively compete using substitutes for the element available from alternative sources.*

C. The Unbundling Requirements Must Be Tailored To Match Differences in the Availability of Substitutes in Particular Geographic Markets.

Basic competition law also requires the Commission to analyze distinct geographic markets in defining section 251(d)(2)=s unbundling requirements. Application of the Aimpair≡ standard to particular elements must be tailored to accommodate differences in the availability of substitute facilities within the relevant geographic market for each network element.

In other words, before the Commission requires an element to be unbundled, it must determine the proper scope of the geographic market for that element, and it should impose an unbundling obligation only in those markets where the ILEC=s network element is the only reasonable alternative available to competitors.¹⁶ The Supreme Court=s remand order made this requirement explicit by instructing the Commission to adopt rules that reflect the Aavailability of elements outside the incumbent=s network.≡ *Iowa Utils. Bd.*, 119 S. Ct. at 735. Because the geographic scope for the available supply and use of substitutes necessarily differs by element, the

¹⁶ No facility can be Aessential≡ under antitrust principles unless it is Ashown to dominate a properly defined relevant market.≡ Areeda & Hovenkamp, ANTITRUST LAW at 208. *See, e.g., Blue Cross & Blue Shield United v. Marshfield Clinic*, 65 F.3d 1406, 1413 (7th Cir. 1995); *City of Malden v. Union Elec. Co.*, 887 F.2d 157, 162 (8th Cir. 1989).

Commission may not adopt a single uniform Aone size fits all≡ national unbundling requirement that ignores relevant market differences.

Nor could the Commission ignore variations between markets simply by delegating to state commissions authority to *relieve* ILECs of a national unbundling obligation in specific areas. Such an approach would fail to satisfy the Commission=s obligation to apply the Anecessary≡ and Aimpair≡ standards A[i]n determining what network elements should be made available.≡ A national rule requiring that an element be unbundled -- imposed in the face of evidence that substitutes are available in certain geographic markets -- would suppress actual competition in those markets and would plainly stifle the investment incentives of existing facilities-based CLECs.

Geographic tailoring will not impose any significant administrative burden on the Commission. As the wealth of evidence supplied by GTE below and in the accompanying submissions shows, the availability of substitutes for each of the elements on the original Rule 319 list is sufficiently clear that the Commission can readily adopt standards that are reasonably tailored to market differences.

D. Any Reasonable Unbundling Standard Must Focus on the Actual Use and Availability of Substitutes in the Marketplace and the Real-World Behavior of CLECs, Rather Than on Any Hypothetical Model or Element-To-Element Cost Comparison.

Regardless of whether the Commission applies essential facilities principles or articulates some other standard, any rational unbundling requirement must look first and foremost to the real-world behavior of actual CLECs. If CLECs are competing today using alternative facilities, whether through self-provision or on a wholesale basis, that should be enough to preclude unbundling. The Commission need not construct any hypothetical model to predict whether such competition is possible. As Professor Kahn has explained, when CLECs are already in the market relying on substitutes to an ILEC element, that fact demonstrates that obtaining [the element] from the incumbent is not "essential" in the most elementary meaning of the term, and sharing of that element should not be required.¹⁷ Kahn Declaration at 7.

¹⁷ See also Kahn Declaration at 8 (an entrant's demonstrated ability to use its own facilities, whether by purchase or construction, . . . clearly demonstrates that the facilities of the [ILEC] are not "essential" -- Aa conclusion reinforced by consideration of the diverse technologies and capabilities converging on the offer of telecommunications services); Areeda & Hovenkamp, ANTITRUST LAW at 202 (Aevidence that the plaintiff is already profitably in the market in which the essential facility is claimed suggests the claimed facility is not essential).

The Commission has repeatedly endorsed such an approach. Thus, the Commission has concluded that the ability of a single LEC (or small numbers of LECs) to interconnect at a particular network point, *see First Report and Order* & 204, to provide access to operations support systems, *see id.* & 520, to offer shared transport in conjunction with local switching,¹⁸ to provide trunk-side interconnection,¹⁹ and to reduce overall operating expenses,²⁰ confirms that other LECs can accomplish the same task. Likewise, economic logic dictates that competitive strategies successfully implemented by one CLEC in one geographic market can be implemented successfully by other CLECs in other markets that share the same defining characteristics. *See Kahn Declaration* at 6-7, 9.

Moreover, the Commission may not set unbundling requirements on the basis of some designated per-element cost differential. The real-world evidence that actual CLECs are competing using substitutes for an ILEC element may not be ignored merely because ILECs might Aenjoy[] a cost advantage≡ with respect to that particular element. Areeda & Hovenkamp, ANTITRUST LAW at 205. As the Supreme Court made clear, the relevant inquiry is whether CLECs, based on their total costs of doing business, are able to compete using their own facilities or facilities purchased from

¹⁸ *See In re Implementation of Local Competition Provisions*, Third Order on Reconsideration and Further Notice of Proposed Rulemaking, CC Docket No. 95-185, 12 FCC Rcd. 12460, at & 26 n.77 (Aug. 18, 1997).

¹⁹ *See In re Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services*, Declaratory Ruling, Report No. CL-379, 2 FCC Rcd 2910, at & 31-33 (May 18, 1987).

²⁰ *See J. Atkinson, C. Barnekov, D. Konuch, W. Sharkey & B. Wimmer, The Use of Computer Models for Estimating Forward-Looking Economic Costs: A Staff Analysis*, at & 64 (Jan. 9, 1997).

wholesalers -- not whether they receive[] a handsome profit but [are] denied an even handsomer one by the absence of an unbundling obligation. *Iowa Utils. Bd.*, 119 S. Ct. at 735 n.11.

Thus, any analysis into the competitive effects of denying access to an ILEC element cannot turn on a formulaic comparison between the cost of a particular substitute for a single element and the cost of purchasing that element from the ILEC. Indeed, such a comparison would shed no light on the competitive viability of a substitute, given the circular nature of comparing a CLEC's cost to an ILEC price established not by the market, but by the Commission. Rather, as Professor Kahn has explained, such an analysis would have to take into account *all* the factors relevant to determining whether a firm can remain competitive in the marketplace, including the competitive advantages facilities-based CLECs have -- from efficiencies stemming from newer network equipment, to economies of scope created by opportunities for product bundling -- and the competitive disadvantages ILECs face, including significant *diseconomies* of scale stemming from obligations to serve all customers in a given territory.²¹ Only if this complete picture establishes that, *on balance*,

²¹ See Kahn Declaration at 12 (AThe point is that a narrow focusing on a particular cost advantage or disadvantage associated with the availability or unavailability of a specific network element could not ascertain a specific cut-off point as permitting or precluding competition, because it fails to take into account the likely offsetting advantages that CLECs are likely to enjoy -- in varying degrees depending upon their own situations -- economies of scale and scope that they would be in a position to exploit by offering local exchange services in combination with their own particular mixes of offerings, as well as the ability to take advantage of available new technologies.≡).

CLECs are unable to compete effectively without access to an ILEC element would section 251(d)(2)s Aimpair≡ test be satisfied.

Constructing a hypothetical or standardized model of CLEC versus ILEC costs would require an extraordinary regulatory enterprise and would necessarily produce arbitrary results. Different CLECs -- just like different ILECs -- do not have the same costs, nor do they share identical competitive advantages and disadvantages.²² It would therefore be almost impossible for the Commission to develop a model that calculates, as suggested by the *Notice of Proposed Rulemaking*, Awhat constitutes a >material= difference≡ in the cost of Aobtaining a network element from an incumbent LEC as opposed to obtaining it through self-provisioning or from an alternative source.≡

Second Further NPRM & 25. Fortunately, where the marketplace has already demonstrated that a CLEC can compete using a substitute for an ILEC element, there is no need for the Commission to determine whether a *hypothetical* CLEC would be impaired in its ability to compete without that element. If CLECs are actually in the market and competing successfully relying on substitute facilities, no further evidence is required for the Commission to conclude that the ILEC=s element should not be subject to an unbundling obligation.

²² See *id.* at 13 (any effort to determine the viability of a substitute by measuring cost differentials Ais an intensely regulatory one≡ that will be Aconfounded≡ by the complexity of the project and lack of uniformity among CLECs).

E. Access To a AProprietary≡ Feature, Function or Capability of a Network Element Should Be ANecessary≡ Under Section 251(d)(2)(A) Only Where the Proprietary Feature, Function or Capability Is Integral To the Operation of the Element Such That CLECs Cannot Make Use of the Element Without Such Access.

As explained above, all elements must satisfy the Aimpair≡ test before they can be subject to unbundling. Over and above the Aimpair≡ test, however, section 251(d)(2) also requires the Commission to determine whether Aaccess to such network elements as are proprietary in nature is necessary≡ before subjecting them to an unbundling obligation. This requirement imposes a second test that must be satisfied before AProprietary≡ elements are required to be unbundled.

Few, if any, network elements (and none of the original UNEs defined in Rule 319) are *entirely* proprietary in nature. The most reasonable interpretation of section 251(d)(2) must recognize that the ANecessary≡ test should apply to proprietary *features, functions or capabilities* of network elements, which are themselves defined to be ANetwork elements≡ under the Act. *See* 47 U.S.C. § 153(29). One example would be a proprietary advanced calling feature developed specially by the ILEC and not offered generally by other telephone companies. If the proprietary feature or functionality is not *integral* to the operation of the element of which it is a part -- if a CLEC can make use of the element without access to the proprietary feature or functionality -- then ILECs should not be required to provide access to that aspect of the element. *If, on the other hand, the proprietary portion is integral to the operation of the element such that the element cannot be*

*used without the proprietary feature, function or capability, then access to it is Anecessary≡ and must be provided.*²³

²³ Of course, if the Commission were to determine that the particular proprietary feature, function or capability in question itself constituted an entirely separate network element (as contemplated by the definition of Anetwork element≡ in 47 U.S.C. § 153(29)) and that this separate element in its own right was essential to competition and met the Aimpair≡ test, such an element would almost certainly also meet the Anecessary≡ test because the proprietary aspect would be inseparable from the entire element.

The purpose of section 251(d)(2)'s Anecessary test is to ensure that investment expectations in intellectual property are not defeated when there is no need to provide access to such property to allow CLECs to compete. The standard we propose is built on the recognition that investment in such property is contingent, to a significant degree, on the prospect that the creator will have an opportunity to earn a substantial return on the investment -- an incentive that will be dissipated needlessly if CLECs are afforded access to proprietary features or capabilities that are not integral to an element's functioning. See Kahn Declaration at 3.²⁴

The Commission's definition of Aproprietary should be crafted with this purpose in mind, encompassing all features, functions and capabilities that are afforded independent legal protection by the intellectual property, trade secret, tort, and contract laws. These laws are designed to create and enforce the expectations of investors seeking to capture returns from risky investments and therefore mark the bounds of legitimate protection for proprietary information.²⁵ Because the potential for undermining investment incentives is equally great whether the features or functionalities are developed internally by ILECs or by third-parties, section 251(d)(2)'s protections should extend to *all* proprietary aspects of ILEC elements regardless of the source.

²⁴ See also Areeda & Hovenkamp, ANTITRUST LAW at 217 (A[f]orcing an innovation -- patented or not -- to be shared . . . chills desirable activities); Evans & Schmalensee, 63 ANTITRUST L.J. at 877 (A*Ex post* rules that limit the returns to successful investments reduce *ex ante* incentives to undertake investments that may prove successful or unsuccessful.).

²⁵ See Evans & Schmalensee, 63 ANTITRUST L.J. at 877 (AThe notion that property created through risky investments or uncertain innovations requires special protection is embodied in several sets of legal rules. The patent laws are an obvious example. Investors in new inventions must be able to expect returns that compensate them, on average, for the risks they bear. Otherwise, they would not invest in the first place and the property would not be created.).

F. The Act Precludes the Commission and the States From Requiring ILECs To Unbundle Elements That Do Not Satisfy the Necessary and Impair Criteria.

The *Notice of Proposed Rulemaking* seeks comment on whether any other factors are sufficiently important in meeting the goals of the 1996 Act to require the unbundling of a network element, even if such unbundling did not otherwise meet the >necessary= and >impair= standards.≡
Second Further NPRM & 30. This suggestion misapprehends the requirements of the Supreme Court=s remand order in *Iowa Utilities Board* and the Act=s plain language.

The Court instructed the Commission to Agiv[e] some substance to the >necessary= and >impair= requirements≡ in determining which elements must be unbundled. *Iowa Utils. Bd.*, 119 S. Ct. at 736. Interpreting the Act in a way that would disregard these standards cannot be squared with that command or the plain meaning of the phrase Aat a minimum≡ in section 251(d)(2)=s opening sentence. By requiring the Commission to consider *at a minimum* the Anecessary≡ and Aimpair≡ standards when determining which elements to unbundle, section 251(d)(2) expressly sets out baseline criteria that must be satisfied before a sharing obligation can be imposed. It also gives the Commission authority to consider *additional* factors when making this determination, and to refrain from imposing unbundling obligations on elements that satisfy the Anecessary≡ and Aimpair≡ standards if doing so would serve the objective of competition. But any rule predicated on the assumption that these standards could be disregarded would have the opposite effect; it would drain the Anecessary≡ and Aimpair≡ requirements of their substance.

Both the Act's plain terms and the Court's decision in *Iowa Utilities Board* therefore compel the conclusion that the Commission must, at a minimum, always find that the necessary and impair standards are satisfied before requiring an element's unbundling.

This analysis also demonstrates two other principles the Commission should articulate in its final order to guarantee that section 251(d)(2)'s standards are not deprived of their meaning. *First*, the Commission should confirm that the States are barred from imposing unbundling obligations pursuant to state law. The Act's necessary and impair standard establishes limits on ILEC unbundling obligations that cannot be ignored or supplemented without harming competition. Because section 251(d)(3) of the Act expressly provides -- consistent with basic principles of preemption law²⁶ -- that states cannot adopt mandates inconsistent with section 251(d)(2) or the Act's procompetitive purposes, the Commission should make clear that states have no authority to predicate additional unbundling obligations on the dictates of state law. As Justice Breyer concluded, the statute's unbundling requirements, read in light of the Act's basic purposes, require balance. *Iowa Utils. Bd.*, 119 S. Ct. at 754 (Breyer, J., concurring in part and dissenting in part).

²⁶ See *Wisconsin Pub. Intervenor v. Mortier*, 501 U.S. 597, 605 (1991) (federal law preempts state law that stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress); *English v. General Elec. Co.*, 496 U.S. 72, 79 (1990) (state law is preempted either if it actually conflicts with federal law or regulates conduct in a field Congress intended the Federal Government to occupy exclusively).

The balance struck by Congress in section 251(d)(2)'s "necessary" and "impair" standards would be improperly frustrated by a State's efforts to expand or contract the Act's unbundling obligations.

Second, the Commission should establish a rule that elements not subject to an unbundling obligation -- either because the Commission deemed in the first instance that they do not satisfy section 251(d)(2) or because the unbundling obligation lapsed after a sunset -- cannot be secured *ex post* by CLECs pursuant to section 252(i). ILECs like GTE have negotiated hundreds of interconnection agreements since the Act was passed in 1996 and, not surprisingly, these agreements do not all expire on the same date. If CLECs are allowed to use section 252(i) to secure access to elements ILECs are providing pursuant to agreements negotiated *prior to* the date on which the obligations for sharing particular elements are removed, sharing obligations will live a life that far exceeds their procompetitive justification. Allowing CLECs to extend unbundling obligations using section 252(i) would therefore serve only to undermine competition -- a result that cannot be squared with the Act's text or its basic purpose.

G. The Inclusion of Certain Elements in the Section 271 Checklist Does Not Compel Their Unbundling.

Section 271(c)(2)(B) of the Act precludes BOCs from offering originating interLATA services unless they satisfy a number of conditions, including offering CLECs Aaccess or interconnection≡ to local loop transmission, switching, transport, directory assistance, and operator services. The *Notice of Proposed Rulemaking* seeks comment on whether the Commission should adopt Aa presumption that the network elements set forth in the competitive checklist of section 271(c)(2)(B) are subject to the unbundling obligation contained in section 251(c)(3).≡ *Second Further NPRM* & 41. As demonstrated by the competition principles discussed above, any such presumption in favor of unbundling would be strongly anticompetitive and inconsistent with section 251(d)(2).

First, it would plainly violate the substantive requirements of section 251(d)(2) to impose unbundling obligations on non-BOC ILECs, like GTE, by virtue of the checklist requirements that apply only to BOCs under section 271. A presumption that elements enumerated in section 271 must be unbundled under section 251 -- regardless of the availability or actual use of substitute elements -- cannot be squared with the Supreme Court=s clear commands. Moreover, such a presumption would be strongly anticompetitive to the extent it imposed unbundling obligations more extensive than those compelled by section 251(d)(2)=s Anecessary≡ and Aimpair≡ standards. Certainly, Congress never intended for section 271's checklist to *supersede* both the Act=s purpose of promoting competition and the plain text of section 251(d)(2).

Second, the Act=s express inclusion of particular elements in the BOC checklist, in addition to the general checklist requirement that a BOC make available those elements required to be

unbundled under section 251, in fact strongly supports the conclusion that section 271 was intended to impose separate and independent obligations from section 251(d)(2)'s unbundling requirements.

Any other reading would render the specifically enumerated checklist items utterly redundant, in violation of basic principles of statutory construction.

Finally, the fact that Congress more than three years ago included certain elements in the section 271 competitive checklist obviously says nothing about whether CLECs can currently compete effectively without access to those elements. Much has changed in the telecommunications marketplace since passage of the Act. As we detail comprehensively in the following sections of these comments, we are in the midst of an ongoing explosion of facilities-based competition that necessarily supersedes any presumption about the prospects for such competition that might have prevailed at the outset in 1996. No such stale presumption can properly displace the substantive examination of today's market as required under section 251(d)(2).

II. CLECs ARE COMPETING EFFECTIVELY USING THEIR OWN FACILITIES -- INCLUDING SWITCHING, TRANSPORT, AND LOOPS -- IN EVERY TYPE OF GTE MARKET.

To assist the Commission in developing its unbundling rules, GTE commissioned PNR & Associates -- a consulting firm with extensive information on the deployment of CLEC facilities and the location and number of CLEC customers -- to profile CLEC activities in eight typical GTE markets. These markets include large urban areas (Los Angeles, Dallas and Tampa), smaller metropolitan areas (Fort Wayne, Indiana and Lexington, Kentucky), a small market (Myrtle Beach, South Carolina) and rural areas (Oxford Junction, Iowa; and LaBelle, Ewing, and Lewistown, Missouri). In each of these markets, CLECs have deployed their own switches, their own fiber networks used to supply interoffice transport, and their own local loops. CLECs operating in these territories are typically able to reach more than 50 percent -- and in some cases as much as *98 percent* -- of the addressable business and residential market just with facilities that are in place *today*. PNR Report at DFW Microplex 4. Moreover, as demonstrated by the PNR profiles of each CLEC operating in GTE=s eight representative territories, these competitors have aggressive plans to expand their networks, penetrate new markets, and continue growing their customer bases -- all using their own facilities. GTE=s experience therefore confirms that CLECs are achieving great success in the marketplace without relying extensively on unbundled ILEC elements.

There are more than 17 facilities-based competitors operating in GTE=s service territory in Los Angeles; 11 in Dallas; eight in Tampa; and two in Lexington and Fort Wayne. *Id.* at 10. And although only one facilities-based competitor operates in each of GTE=s three studied small and rural markets, these competitors have succeeded in acquiring as many as *92 percent* of GTE=s customers.

Id. at Iowa 2. In six of the eight GTE markets surveyed, the predominant method of CLEC entry, *by far*, is a complete bypass of GTE=s ILEC network. Competitors in these markets supply service to customers either by constructing their own networks from stem to stern or by supplementing their networks with components purchased from wholesale providers catering to the CLEC community. CLECs serve very few lines in these markets using unbundled GTE elements. Facilities-based carriers thus dominate the CLEC market in urban areas, as confirmed by the following tables identifying the number of lines in GTE=s Tampa and Los Angeles territories served by facilities-based CLECs. *Id.* at 14, 16.

TAMPA AREA (GTE Service Territory)			
CLEC	Bypass	Resale Lines	UNE Loops
AT&T	192	33	16
e.spire	1,310	2,940	14
Intermedia	2,000	4,750	
MCI WorldCom	10,117	18	7
Time Warner Telecom	125		
US LEC	74		
WinStar	2,000	9	

LOS ANGELES AREA (GTE Service Territory)			
CLEC	Bypass	Resale Lines	UNE Loops
Allegiance	25		
AT&T	7,150	10	
Cox Telecom	185		
Focal Comms.	350		
GST	2,770	1,100	
ICG Comms.	8,215	900	
MCI WorldCom	10,491	2,596	
MGC Comms.	116		5,274
MediaOne	150		
NextLink	2,400		1,020
PacBell CLEC	2,775		
Teligent	50		
Time Warner Telecom	95	400	
WinStar	2,645		

Likewise, facilities-based CLECs in small markets and rural areas are serving an extraordinary number of lines relative to the small totals in these markets, as the following tables for Oxford Junction (400 lines) and LaBelle, Ewing, and Lewistown (1,516 lines) demonstrate. *Id.* at 20-21.

OXFORD JUNCTION, IOWA (GTE Service Territory)			
CLEC	Bypass	Resale Lines	UNE Loops
Lost Nation-Elwood	370		

LaBELLE, EWING AND LEWISTOWN, MO (GTE Service Territory)			
CLEC	Bypass	Resale Lines	UNE Loops
Mark Twain Comms.	574		

The CLEC networks deployed in the eight studied GTE markets *uniformly* depend on self-provided switching and, with only one exception, on substitutes for unbundled ILEC transport. Moreover, a substantial percentage of these CLECs provide their own loops, network interface devices, signaling, operator services, directory assistance, and operations support systems -- or purchase these items from wholesale providers. Thus, PNR=s profile of the CLECs operating in GTE=s eight studied markets reveals the following matrix. *Id.* at 23.

CLECs OPERATING IN EIGHT GTE MARKETS

CLEC	Switching	Transport	Loops/NID	OSS	SS7	OS/DA
Allegiance	T	T	*	T	T	*
AT&T	T	T	T	T	T	T
Cox Calif. Telecom.	T	T	T			*
e.spire	T	T	T	T	T	*
Focal Comms.	T	*	*			
Frontier	T	T	T	T	T	T
GST	T	T	T		T	*
HTC Comms.	T	T	T	T	T	T
Hyperion	T	T	T			
ICG Communications	T	T	T	T	*	*
Intermedia	T	T	*	T	*	*
KMC Telecom	T	T	T			
Level 3	T	T	*			
Lost Nation-Elwood	T	T	T	T	T	T

CLECs OPERATING IN EIGHT GTE MARKETS						
CLEC	Switching	Transport	Loops/NID	OSS	SS7	OS/DA
Mark Twain Comms.	T	T	T	T	T	T
MCI WorldCom	T	T	T	T	T	T
MGC Comms.	T	T	*			
MediaOne	T	T	T			
NextLink	T	T	T	T	*	*
PacBell CLEC	T	T	*	T	T	T
SBC	T	T	*	T	T	T
Teligent	T	T	T	T	*	T
Time Warner Telecom	T	T	T			T
US LEC	T	T	*		T	
USXCHANGE	T	T	*	T		
WinStar	T	T	T	T	*	*
T- CLEC self-provides element in some or all markets. * - CLEC leases element from ILEC or non-ILEC source. Blank - information not available.						

The CLECs operating in GTE=s markets are financing their network buildouts by raising extraordinary amounts of capital. For example, both NextLink and Teligent have market capitalizations exceeding \$2 billion.²⁷ Likewise, Intermedia and Winstar have market capitalizations exceeding \$1 billion.²⁸ Having invested these substantial funds in deploying new networks, these CLECS are poised to capture an extraordinary percentage of GTE=s customers just with the facilities that are in the ground today. The following table identifies the percentage of the addressable market in GTE=s territories that lies within 1,000 feet of CLEC fiber or 18,000 feet of a CLEC switch. Customers falling within either of these ranges could readily be served by a traditional copper loop running from either a CLEC=s existing fiber or switch.²⁹

IMMEDIATELY ADDRESSABLE MARKETS		
GTE Service Territory In:	Fiber B 1,000 Feet	Switch B 18,000 Feet
Dallas/Fort Worth Area	98%	91%
Business	97%	93%
Residential	98%	91%

²⁷ Merrill Lynch, *CLEC Vital Signs: Update for 4Q98 and Trends*, at 16 (Mar. 11, 1999).

²⁸ *Id.*

²⁹ PNR Report at DFW Metroplex 4, Los Angeles 4, Tampa 4, Lexington 4, Fort Wayne 4, and Myrtle Beach 4.

IMMEDIATELY ADDRESSABLE MARKETS		
GTE Service Territory In:	Fiber B 1,000 Feet	Switch B 18,000 Feet
Tampa Area	16%	60%
Business	27%	69%
Residential	14%	58%
Los Angeles Area	18%	64%
Business	25%	67%
Residential	16%	63%
Lexington, KY	42%	78%
Business	55%	81%
Residential	39%	77%
Fort Wayne, IN	25%	55%
Business	31%	58%
Residential	24%	54%
Myrtle Beach, SC	38%	44%
Business	56%	50%

IMMEDIATELY ADDRESSABLE MARKETS		
GTE Service Territory In:	Fiber B 1,000 Feet	Switch B 18,000 Feet
Residential	33%	42%

Likewise, rural telephone cooperatives are moving out of their traditional ILEC territories and overbuilding GTE=s network. Rural cooperative ILECs= ability to fund these CLEC ventures is enhanced by their eligibility for government-subsidized loans and enhanced capital budgets created by the fact that rural cooperatives pay no federal income taxes. For example, in Oxford Junction, Lost Nation-Elwood Telephone Company completely overbuilt GTE=s local network and, after launching an aggressive marketing plan, acquired 92 percent of GTE=s customers in just a few months. PNR Report at Iowa 2. Similarly, in Ewing, LaBelle and Lewistown, Mark Twain Rural Telephone Company executed a near-complete overbuild of GTE=s network and promptly acquired 38 percent of GTE=s customers in that territory. *Id.* at Missouri 3. Most of GTE=s rural and smaller markets are in close proximity to, or completely surrounded by, similar rural telephone cooperatives.

GTE therefore faces significant competition from CLECs that have deployed their own switching, transport, loops, and other facilities in every kind of market in which it operates. This competition will only get more fierce as these and other CLECs fully implement plans to expand their networks and penetrate new geographic and customer markets. To illustrate just a few examples of these plans:

- ! NextLink is in the process of completing a traditional fiber network, served by its own switch, that will serve Avirtually every business in Dallas.≡ *Id.* at 74.
- ! Level 3 is currently developing a soft-switch technology that will allow seamless integration of router-based IP networks and traditional circuit-switched telephone networks. It is planning to deploy this technology in a network that will reach 50 of the largest markets in the United States. *Id.* at 58-59.
- ! Cox Communications recently began providing cable-based telephony to residential and small business customers in California and Nebraska and plans to expand its network -- which relies on self-provided switching -- to reach a wide range of new markets. *Id.* at 27. Similar cable-based service -- also relying on self-supplied switching -- will soon be launched in markets across the country by AT&T and Time Warner. *Id.* at 24, 84.

As will be illustrated in more detail below, the real-world actions of these numerous facilities-based CLECs demonstrate that competition can succeed in every type of market -- urban, suburban, and rural -- without ILECs being required to provide unbundled access to most network elements.

III. THE REAL-WORLD ACTIONS OF CLECs CONFIRM THAT SWITCHING, OPERATOR SERVICES AND DIRECTORY ASSISTANCE, SIGNALING, AND THE NETWORK INTERFACE DEVICE SHOULD NOT BE SUBJECT TO UNBUNDLING.

A. Hundreds of CLECs Currently Self-Supply Their Own Switching in Markets Across the Nation. Switching Therefore Does Not Meet Section 251(d)(2)=s AImpair≡ Test.

Numerous alternatives to ILEC switching are available to CLECs -- and in fact are currently being used by CLECs -- on a nationwide basis. As of March of 1999, CLECs had deployed a total of 724 switches, with *167 different CLECs* placing switches in *320 different cities*. UNE Fact Report at I-1. PNR=s survey of eight typical GTE markets confirmed that *every* facilities-based CLEC operating in those areas self-provided its own switching. Switch

manufacturers are marketing to CLECs products that are inexpensive and highly scalable, allowing even the smallest rural CLECs -- like Mark Twain Rural Telephone operating in GTE=s rural Missouri territory -- to self-provide their own switching. Thus, even though the five largest CLECs account for over 70 percent of CLEC revenues, 162 other competitors -- including CLECs that serve only small and insular markets like GTE=s territory in Oxford Junction, Iowa -- have found it economical to deploy their own switching. *Id.*

1. CLECs Operating in Every Type of GTE Market -- From the Largest City To the Smallest Rural Town -- Are Self-Providing Their Own Switching.

In the eight GTE markets surveyed by PNR, facilities-based CLECs have deployed 130 switches. PNR Report at 10. The following table highlights both the number of facilities-based CLECs operating in and around GTE=s typical markets and the number of switches deployed in each.

Market Area	Facilities-Based CLECs	CLEC Switches
Los Angeles Area	22	47
Dallas/Fort Worth Area	27	45
Tampa Area	14	20
Fort Wayne, IN	2	2
Lexington, KY	2	2

Myrtle Beach, SC	1	8
LaBelle/Ewing/Lewistown, MO	2	3
Oxford Junction, IA	2	3

As the maps on the following three pages indicate, CLECs in markets from Los Angeles to Tampa to Oxford Junction are capable of serving an extraordinary percentage of the customers in markets of every size just with switches that are in place today. Indeed, every facilities-based CLEC operating in the GTE markets studied by PNR -- whether it offers service over wireline, cable, or fixed wireless loops, and whether it serves large markets or small -- provides its own switching. *Id.* at 23. Specifically:

- ! Allegiance Telecom operates one class-five switch in both Dallas and Los Angeles.
- ! AT&T operates two class-five switches in Dallas, one in Tampa, and one in Los Angeles.
- ! Cox Communications -- a cable-based provider -- operates one class-five switch in Los Angeles.
- ! e.spire operates three class-five switches in Dallas and one in Tampa.
- ! Focal Communications operates one class-five switch in Los Angeles.
- ! Frontier operates one class-five switch in Dallas and another in Los Angeles.
- ! GST operates seven class-five switches in Los Angeles and one in Dallas.
- ! HTC Communications serves small GTE markets in South Carolina -- including Conway and Myrtle Beach -- using three remote switches connected to the switches of its ILEC affiliate.

- ! Hyperion operates one class-five switch in Lexington.
- ! IGC Communications operates one class-five switch in Dallas, one in Lexington, and four in Los Angeles and the surrounding suburbs.
- ! Intermedia operates four class-four/five switches in Dallas, four in Tampa, and one in Los Angeles.
- ! KMC Telecom operates one class-five switch in Fort Wayne.
- ! Level 3 operates one class-five switch in Dallas and one in Los Angeles.
- ! Lost Nation-Elwood Telephone serves GTE=s rural territory in Oxford Junction using one remote switch connected to the switch of its ILEC affiliate.
- ! MTC Communications serves GTE=s rural territory in LaBelle, Ewing, and Lewistown using three remote switches connected to the switches of its ILEC affiliate.
- ! MCI WorldCom operates four class-five switches in Dallas, one in Tampa, and three in Los Angeles.
- ! MGC Communications serves Los Angeles using two class-five switches.
- ! MediaOne operates one class-five switch in Los Angeles.
- ! NextLink operates one class-five switch in Dallas and three in Los Angeles.
- ! Teligent operates one class-five switch in Dallas, another in Tampa, and a third in Los Angeles.
- ! Time Warner Telecom serves both Dallas and Los Angeles using a class-five switch in each market.
- ! US LEC operates one class-five switch in Tampa.
- ! USXCHANGE operates one class-five switch in Fort Wayne.

! Winstar operates one class-five switch in Dallas, one in Tampa, and three in Los Angeles.

GTE=s unique experience as an ILEC serving the full panoply of markets in the United States therefore demonstrates that CLECs can compete effectively in any market using their own switching.³⁰

³⁰ In the Act=s legislative history, Congress stated that the unbundling requirement=s purpose is to require ILECs to share Acontrol over the essential facilities needed for the provision of local telephone service.≡ H.R. Rep. No. 104-204, at 49 (1995). Although Congress stated that the Aequipment with capabilities of routing calls≡ fit this definition, whatever predictive judgment or assumptions Congress may have harbored in 1995 are swamped by the wealth of real-world market evidence. The fact remains that Congress did not *mandate* the unbundling of switching or any other element. Congress required the Commission to apply substantive standards that must take into account the availability of substitutes in the market.

2. Numerous Manufacturers Are Targeting CLECs With Switches That Are Highly Scalable, Able To Serve Remote Territories, and Are Very Inexpensive.

While switch manufacturers at one time primarily catered to the needs of ILECs, these same manufacturers have now developed products that are targeted specifically to the CLEC market. (This development is not surprising, given that CLECs have deployed 439 more switches than the RBOCs and GTE combined since the Act was passed. UNE Fact Report at I-1.) These switches targeted to CLECs are inexpensive, highly scalable, and can serve territories spanning as far as 1,300 miles in diameter -- guaranteeing that even the smallest CLECs can self-supply their own switching without substantial up-front expense. NECI Report at 9-10, 20-21. CLECs need therefore only purchase the switching capacity and functionality they currently require, confident that they will be able to expand economically and without any service interruptions.

The three major United States switch manufacturers design scalable switches expressly for CLECs. Nortel offers the DMS-10 Local Switch, which is designed to serve markets smaller than 12,000 lines, *id.* at 12, At a price that has put it at the center of the entrepreneurial strategies of Competitive Local Exchange Carriers across North America,≡ UNE Fact Report at I-28 (citation omitted). Lucent markets its 5ESS-2000 switch directly to CLECs, noting that A[w]ith a minimal investment in hardware, real estate and staff, emerging competitors can quickly provide telecommunications services and support a large number of customers and services.≡ *Id.* (citation omitted). The smallest switch configuration in this product line -- the Very Compact Digital Exchange -- is expressly designed for CLECs Atargeting small communities, rural areas, and

private network locations.≡ NECI Report at 12. Likewise, Siemens touts its DCO switching system as Aa local switching exchange designed to serve the small to medium size markets as well as a low cost solution for Competitive Local Exchange Carriers (CLECs).≡ UNE Fact Report at I-28 (citation omitted). These switches support a full range of services -- local and long-distance, ISDN, Internet access, wireless PCS, Advanced Intelligent Network Services, and interactive and multimedia services. *Id.* at I-28-29. Moreover, these switches can be used to serve any type of customer, from the smallest residence to the largest business.³¹

In addition, many new, smaller switch manufacturers -- like Castle Networks and Coyote Technologies -- target the CLEC market exclusively. *Id.* at I-29. Castle Networks= C2100 Services Mediation Platform is A designed to extend the range of class-five services to smaller markets where it is not cost effective to use 5ESS or DMS 500, while providing a platform for the creation of new services.≡ *Id.* (citation omitted). Coyote=s DSS switch A is designed to secure the customer threshold and economic benefits of smaller switches, without some of the feature compromises that smaller switches impose.≡ *Id.* (citation omitted). Coyote=s switching solutions provide ACLECs . . . with cost-effective, scalable solutions that enable them to enter new markets with revenue-generating services.≡ *Id.* (citation omitted).

³¹ See Kahn Declaration at 10 (A switches and transport . . . are supplied without distinction by customer type≡).

All of these switching products, whether supplied by large or small manufacturers, are available at costs well within the reach of even the smallest CLECs. On a per-line basis, prices declined over 60 percent from 1986 to 1996 and are projected to fall another 12 percent by 2000. *Id.* at I-28. Both the Commission and IXC's like AT&T and MCI WorldCom have endorsed the view that switches are available at prices below \$500,000, NECI Report at 20-21 -- a price that is made much easier to pay by the fact that switch manufacturers offer CLECs financing on extraordinary terms. UNE Fact Report at I-30-31.

The switches marketed to CLECs by equipment manufacturers can be deployed very quickly.³² Lucent has developed Aprefab central offices specifically to reduce installation time for CLECs -- At the entire process, from prefab to deployment of service takes 40 days. *Id.* at I-30 (citation omitted). According to e.spire -- a CLEC that has deployed four switches in GTE's Tampa and Dallas territories alone -- its typical switch installation takes no longer than 28 weeks from the time a competitive provider places an order with its switch vendor to the time the

³² The Commission should not confuse this issue -- the speed with which a CLEC switch can be deployed -- with any supposed delays that CLECs that are self-providing switching face in receiving hot cuts from ILECs. To the extent that CLECs face any such delays, the Commission should remedy the problem by enforcing its *existing* requirement that ILECs deliver unbundled loops to CLEC switches within a reasonable time, with a minimal service disruption, and of the same quality as loops the ILEC uses to serve its own customers. See *In re Application of BellSouth Corp. for Provision of In-Region, InterLATA Services in Louisiana*, Memorandum Opinion and Order, CC Docket No. 98-121, 13 FCC Rcd 20599, at ¶ 185 (1998) (*BellSouth Order*). The Commission cannot, however, require switching to be unbundled to avoid the need for CLECs to procure hot cuts. Doing so would both ignore the limiting standards imposed on ILEC unbundling obligations by section 251(d)(2) and would injure competition -- all to address an undocumented problem that could be addressed with far less draconian solutions.

switch is turned up.≡ *Id.* This process is aided by the fact that vendors offer systems on a turnkey basis, supplying all the technical expertise needed to get switches up and running. *Id.*

Switches marketed to CLECs are also able to serve numerous markets scattered over a wide geographic expanse. Many CLECs use their switches to serve multiple ILEC rate centers. Indeed, the average CLEC switch is used to serve 14 ILEC rate centers. *Id.* at I-23. AT&T has maintained that a single switch can readily be used to serve customers within a 125-mile radius -- a fact readily demonstrated by CLEC ITC Deltacom, which uses a switch in Columbia, South Carolina to serve Greenville (100 miles away) and Atlanta (190 miles away). *Id.* This distance can be expanded up to *650 miles* by attaching a remote switch to the CLEC's main switch. Nortel offers its Remote Switching Center-S that A[e]xtends a full complement of host switch features to subscribers up to 650 miles from a DMS-100 or DMS-500 host.≡ *Id.* (citation omitted). The Lucent 5ESS enables a remote switching module to be located in a different Local Access Transport Area (LATA) and up to 600 miles from the host.≡ *Id.* at I-23-24 (citation omitted). Siemens offers switch remotes that can be configured to support as few as *24 lines*, guaranteeing that CLECs can reach even the smallest and most rural markets with their own switches. The viability of this remote strategy is confirmed by the fact that CLECs are already serving GTE's small markets like Myrtle Beach and rural areas like Oxford Junction, LaBelle, Ewing, and Lewistown using remote switches. PNR Report at 48, 66, 69.

Given that switches can be equipped to serve areas 650 miles from the switch location, the entire continental United States could be reached by the CLEC switches currently deployed

in New York, Atlanta, Dallas, Denver, Spokane, St. Paul, and Los Angeles alone. NECI Report at 19 & Attachment C. Assuming conservatively, however, that the effective range of a switch is only 125 miles, the great majority of the continental United States could still be served just by the CLEC switches that are operational *today*. *Id.* at 20 & Attachment D.

3. Numerous Substitutes for Traditional Wireline Switches Are Available in the Marketplace.

In addition to purchasing and using their own smaller wireline switches, CLECs can use other switching equipment as a substitute for ILEC switches. Because CLECs can use IXC switches, wireless switches, and packet switches to provide local service, long distance companies, wireless carriers, and ISPs can have ready opportunities to begin bundling their products with local service.

Long-Distance Carriers= Switches. Switches like Nortel=s DMS-500 and Lucent=s 5ESS are now routinely configured to support both local and long-distance services. UNE Fact Report at I-31. AT&T is already using 34 of its roughly 145 4ESS switches to provide competitive local service in 379 rate centers. *Id.* at I-32.

Wireless Switches. All of the major switches in the marketplace today are capable of handling both wireline and wireless communications. *Id.* Many of the switches that wireless carriers are using -- including the Lucent 5ESS, Nortel DMS 100, and Ericsson AXE-10 -- are the same switches used by wireline LECs. *Id.* Wireless carriers operate over 3,300 switches in the United States, approximately 2,500 of which are owned by carriers other than BOCs and

GTE. *Id.* These switches can be outfitted to provide local service and used as a facilities-based springboard to penetrate new markets.

Packet Switches. According to a conservative estimate, CLECs have already deployed 50 packet switches -- switches that are already being used to siphon local voice traffic from ILEC voice networks. *Id.* at I-33-34. Numerous other CLECs have likewise announced major investments in packet switches to provide IP telephony. *Id.* at I-34. Overall, packet switches are much more cost-efficient than circuit switches and are therefore even easier for CLECs to deploy. *Id.*

4. CLECs That Are Self-Supplying Their Own Switching Are Succeeding in the Marketplace.

The brisk revenue growth enjoyed by CLECs who are providing their own switching readily demonstrates that such CLECs have no difficulty competing effectively in the marketplace. Looking at a few typical examples of CLECs operating in the eight GTE markets surveyed by PNR:

- ! e.spire, which earned only \$0.3 million in revenues in 1995, collected \$156.7 million in 1998 -- an increase of 12,967 percent -- and earned \$58.1 million in the first quarter of 1999. NECI Report at 22.
- ! Intermedia Communications, Inc. has been similarly successful deploying its own switches -- growing its revenues from \$38.6 million 1995 to \$712.7 million in 1998. *Id.* at 23.
- ! Time Warner Telecom increased its revenues from \$6.9 million in 1995 to \$121.9 million in 1998 -- an increase of 1,667 percent. *Id.*
- ! US LEC grew its revenues from \$6.5 million in 1997 to \$84.7 million in 1998 -- an increase of over 1,200 percent in just one year. *Id.*

The factual record is thus clear that CLECs have ample alternatives available to ILEC switching and that CLECs relying on these alternatives can compete effectively. Hundreds of CLECs are self-providing switching in markets across the country -- from the largest metropolitan markets like Los Angeles and Dallas to the smallest rural markets like Oxford Junction and LaBelle. Switch manufacturers are directly targeting their products to the CLEC market, ensuring that scalable switching products are available for even the smallest CLECs. Every marketplace indicator therefore points to the fact that CLECs do not need access to ILEC switching to compete effectively. Under any reasonable interpretation of section 251(d)(2)=s Aimpair≡ standard, switching therefore cannot be subject to unbundling.

B. A National Competitive Market Exists for Operator Services and Directory Assistance. Section 251(d)(2)=s Aimpair≡ Test Therefore Precludes the Commission From Ordering ILECs To Provide Unbundled Access To These Elements.

The Commission defines operator services (OS) as Aany automatic or live assistance to a consumer to arrange for billing or completion, or both, of a telephone call,≡³³ and directory assistance (DA) as a service that Aallows subscribers to retrieve telephone numbers of other subscribers.≡³⁴ There is no question that the market for these services is competitive and therefore that CLECs would not be -- by any reasonable definition of that term -- Aimpaired≡ in

³³ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19,392, at & 110 (1996).

³⁴ *BellSouth Order* & 8 n.14.

their ability to provide service without access to ILEC OS and DA. Many CLECs are already self-providing these services on a national basis and are providing wholesale OS and DA to CLECs on terms that afford even the smallest competitors ready access. Moreover, both the Act and the Commission's rules already require ILECs to provide non-discriminatory access to their OS and DA databases, and all of the other labor and equipment required to provide these services is readily available on the open market. No barriers to entry therefore preclude any CLEC from self-providing or purchasing wholesale OS and DA services.

Numerous CLECs are currently self-providing OS and DA services. In the eight GTE markets studied by PNR, AT&T, Frontier, MCI WorldCom, Teligent, and Time Warner Telecom all self-provide OS and DA services. PNR Report at 19. Indeed, AT&T, MCI WorldCom, and Sprint, all offer *nationwide* directory assistance service that provides Atelephone listings anywhere in the United States.≡ UNE Fact Report at IV-1 (citation omitted). AT&T markets A00 INFO≡ nationally to its presubscribed customers. *Id.* Both AT&T and MCI WorldCom offer DA using 10-10-XXX dial-around patterns, which are accessible from any telephone in the Nation. *Id.* MCI WorldCom launched its A10-10-9000" directory assistance service in October 1998 and AT&T has since introduced A10-10-ATT-00.≡ *Id.* at IV-1-2. AT&T, MCI WorldCom, and Sprint also provide OS nationwide via toll-free 800 numbers. Using any of these services, customers may place calling card, collect, bill-to-third number, and person-to-person calls. *Id.* at IV-2.

A substantial number of CLECs also provide wholesale OS and DA, offering re-branded service to numerous CLECs. The largest wholesale OS and DA providers are Excell Agent Services, Teltrust, InfoNXX, Metro One, HebCom, and Frontier Communications. *Id.* at IV-4-5. Excell provides service on a nationwide basis as the wholesale arm of AT&T's national directory information service. *Id.* at IV-4. Teltrust provides service to numerous CLECs and IXC's -- including US Long Distance, MCI-WorldCom, and Qwest Communications -- marketing its ability to supply nationwide origination and termination services with a variety of live agent and automated network platform services, configured to each client's needs. *Id.* (citation omitted). InfoNXX markets its service as being a true alternative to telephone company directory assistance. *Id.* (citation omitted). Metro One serves customers like AT&T, AirTouch, and Sprint, describing itself as a leading provider of [enhanced directory assistance] for the telecommunications industry. *Id.* (citation omitted). Numerous CLECs operating in GTE's markets provide competitive DA to their end-user customers through arrangements with these wholesale providers. For example, GST provides directory assistance using services obtained from Metro One; Cox Telecommunications provides directory assistance using services obtained from Teltrust; and Winstar provides directory assistance services obtained from Frontier. *Id.* at IV-5. These arrangements are available to CLECs of any size, as wholesalers offer packages of as few as 1000 data listings at readily negotiable prices. *Id.*

Moreover, no entry barriers preclude CLECs or would-be OS and DA wholesalers from entering the market. To provide competitive national OS and DA services, CLECs need four

things: access to a national database that provides name, address, and telephone listings; operators; computers; and a building in which to house a call center. Each of these four items is readily available on the open market.

CLECs have an abundance of database options at their disposal to provide the listing information needed to self-supply or wholesale OS and DA services. Section 251(b)(3) of the Act requires all LECs to provide to any requesting company nondiscriminatory access to . . . operator services, directory assistance, and directory listings.³⁵ Pursuant to this section, the FCC adopted Rule 217, which requires all LECs to permit competing providers to have access to and read the information in the LEC's directory assistance databases.³⁶ 47 C.F.R. § 51.217. Rule 217 thus guarantees CLECs non-discriminatory access to every LEC OS and DA database.³⁵

³⁵ Indeed, Rule 217 already requires LECs to provide CLECs access to operator services and directory assistance services . . . in their entirety, including access to any adjunct features (*e.g.*, rating tables or customer information databases) necessary to allow competing providers full use of these services.³⁶ LECs are required to provide these services on a branded or unbranded basis so that CLECs may substitute their own brand-name announcements for those of the LEC. In light of these requirements, the only effect of requiring ILECs to provide unbundled OS and DA access would be to require them to provide this already available service at a TELRIC price. As Professor Kahn explains, combining a mandatory sharing obligation with a requirement that an element be sold at such a price would kill every incentive for CLECs to invest in their own OS and DA and would severely

hamper the competitive viability of existing wholesale OS and DA providers. *See* Kahn Declaration at 13-14.

Likewise, Section 222(e) of the Communications Act requires all telecommunications carriers to provide their subscriber information to any person upon request for the purpose of publishing directories in any format.[≡] This information is used by a significant number of firms -- including Metromail, VoltDelta, InfoUSA, Dun & Bradstreet, R.R. Donnelley, Axicom Corporation, and The Berry Company -- to supply name, telephone number, and address information on a local and nationwide basis. UNE Fact Report at IV-8. These companies typically contract with LECs to obtain listing information that is updated on a daily basis, thereby ensuring database accuracy. *Id.* InfoUSA, for example, invests \$30 million per year to compile its yellow and white page listings database, which is updated daily, and it will soon be able to update [its] customers daily, weekly, or monthly via e-mail.[≡] *Id.* at IV-8-9 (citation omitted). Many of these companies provide information on a per listing basis or supply their entire databases on magnetic tapes or CDs. *Id.* at IV-9 This same information is also widely available on the Internet free of charge. Switchboard.com -- the most widely used directory service Web site -- was ranked by one study as one of the top 10 most frequently visited sites on the Internet. *Id.* at IV-2. Other major DA Web sites include Alta Vista People Search, Yahoo! People Finder, InfoSpace, InfoNow, Zip2.com, and AT&T's new www.anywho.com. *Id.* at IV-2-3.

Operators, the second major input for any OS and DA provider, are also widely available in the marketplace. ILECs obviously exercise no control over the labor market and have no ability to preclude competitors from hiring and training the personnel needed to provide OS and DA services. Thus, both AT&T and MCI WorldCom employ their own operators; Teltrust

employs over 900 operators; and in March 1999, Excell announced an aggressive hiring campaign to employ 2,000 new operators to meet the demands of being named the wholesale agent for AT&T's national directory service. *Id.* at IV-10.

Likewise, ILECs exercise no control over the market for OS and DA computer equipment or real estate. Nortel, IBM, Lucent, Volt Delta, PC Plus, and Alcatel provide the operator platforms, database applications, and search engines required to provide competitive OS and DA services. *Id.* Call center real estate is also widely available, as demonstrated by the actions of existing wholesale OS and DA providers. Teltrust, for example, operates four state-of-the-art megacenters that serve the entire country; HebCom operates five regional call centers that serve the whole United States; Excell operates six call centers, *each* serving the entire country; InfoXXX provides nationwide service using four call centers; and McLeod USA operates a single national call center. *Id.* at IV-9-10 (citation omitted).

Given both the ubiquity of the inputs necessary to provide OS and DA services, and the fact that numerous CLECs are currently self-supplying or wholesaling OS and DA services, section 251(d)(2)'s Aimpair test precludes the Commission from requiring these elements to be unbundled. At least five CLECs have demonstrated an ability to self-supply this element just in the eight GTE markets studied by PNR, and at least six other CLECs provide national OS and DA services on a wholesale basis. CLECs entering the market therefore have ample choices among OS and DA providers and are free, facing no barriers in their ability to secure the necessary inputs, to self-provide these services. The success of OS and DA wholesalers confirms

that any excess capacity created by self-supplying CLECs can readily be resold, demonstrating that even economies of scale present *no* barrier to entry in this market. With so many OS and DA options available to CLECs on a national basis, ILECs cannot be required to provide unbundled access to OS and DA under any reasonable interpretation of section 251(d)(2)'s Aimpair≡ test.

C. Numerous CLECs Are Either Building Their Own Signaling Networks or Are Purchasing Signaling Service From Wholesalers. Section 251(d)(2)'s Aimpair≡ Test Therefore Precludes Signaling From Being Subject To Unbundling.

CLECs seeking alternatives to ILEC-provided signaling likewise have ample alternatives available in the marketplace. *First*, as demonstrated by the experience of numerous CLECs operating in the GTE markets studied by PNR, competitors are readily able to provide their own signaling services. Numerous firms supply the equipment necessary to operate a signaling network -- including Lucent, Tekelec, Nortel, Alcatel, IEX Corporation, SummaFour, and Siemens -- and this equipment can typically be mixed and matched because it is based on standard interfaces and protocols. NECI Report at 47. Given the widespread availability of signaling hardware and software, in the eight GTE markets studied by PNR alone, 12 CLECs -- including Allegiance Telecom, AT&T, e.spire, Frontier Communications, GST, HTC Communications, and Lost Nation-Elwood Telephone -- have opted to build their own signaling networks. PNR Report at 23. GST's President and CEO recently explained that, with its own SS7 network, the company is Areducing [its] reliance on third parties, increasing [its] speed to market for new services, lowering [its] operational network costs, and increasing [its] fraud protection capabilities.≡ NECI Report at 47 (citation omitted). The fact that CLECs enjoy a

competitive *advantage*, not disadvantage, as a result of deploying their own signaling networks is confirmed by the substantial revenue growth and ability to attract capital enjoyed by GST, e.spire, and other CLECs that are self-providing this service. NECI Report at 22-23, 58-59, Attachment F.

Second, CLECs seeking competitive alternatives to ILEC-provided SS7 can purchase signaling services from numerous wholesale providers, including GTE Intelligent Network Services, SNET, Illuminet, BTI Telecom Services, TNSI Telecom Division Services, NaviNet, Revcom, and Targus Information Group. *Id.* at 48-49. These providers -- which are experiencing sharp revenue growth as a result of building demand -- offer CLECs access and interconnection to SS7 networks, access to and storage of telephone numbers, customer databases and related services, and call set-up and management. *Id.* at 47, 50. CLECs purchasing signaling service from these wholesalers need only establish a single connection to the provider=s network, and interconnections are nationwide. Prices for wholesale signaling service are highly competitive and wholesale contracts are available to even the smallest CLECs. *Id.* at 49.

Because ample marketplace alternatives are therefore available to ILEC signaling, section 251(d)(2)=s Aimpair≡ test precludes that element from being subject to an unbundling obligation.

D. Because Network Interface Devices Are Inexpensive Off-the-Shelf Products Provided in a Competitive Market, They Do Not Satisfy Section 251(d)(2)=s Aimpair≡ Test.

NIDs are an inexpensive, off-the-shelf piece of equipment that any CLEC can acquire on the open market from numerous non-ILEC sources. In the eight typical GTE markets surveyed by PNR, 17 of the operating 26 facilities-based CLECs -- including e.spire, Frontier, GST, Hyperion, ICG Communications, KMC Telecom, Lost Nation-Elwood Telephone, Teligent, and Winstar -- supply their own NIDs. PNR Report at 23. NIDs are manufactured by numerous competitors -- including Lucent, Sicor, Keptel, Gusto Communications, AMP, 3M, Charles Industries, Raychem, Reltec, and TII Industries -- and are available in any volume a CLEC could desire. UNE Fact Report at III-28. AT&T and MCI have placed the cost of a residential NID at only \$25 (plus \$4 per line for a protection block) and a business NID at only \$40 (plus \$40 for a protection block). *Id.* ILECs purchase their NIDs from these very same sources at the same prices, giving them no competitive advantage over CLECs in NID purchasing. Moreover, because the inputs required for NID installation -- labor, trucks, and screwdrivers -- are all also readily available to any CLEC in open competitive markets -- there is no reason why CLECs cannot compete effectively without access to the ILEC NIDs. Section 251(d)(2)=s Aimpair≡ test therefore precludes NIDs from being subject to an unbundling obligation.³⁶

IV. BECAUSE THE MARKETS FOR INTER-OFFICE TRANSPORT AND LOOPS ARE LOCALIZED, THE COMMISSION=S RULES MUST TAKE ACCOUNT OF DIFFERING CIRCUMSTANCES IN DIFFERENT GEOGRAPHIC MARKETS.

A. CLECs Located in Typical GTE Markets Are Deploying Their Own Networks Used To Provide Inter-Office Transport and Local Loops.

³⁶ Even if NIDs were not required to be unbundled as network elements, GTE is not likely to incur the costs of removing its NIDs from unbundled loops.

In the eight typical GTE markets studied by PNR -- as in markets across the country -- CLECs are deploying their own networks to self-provide interoffice transport and local loops. Indeed, all but one of the 26 facilities-based CLECs operating in these urban, suburban, and rural GTE markets provide their own transport, and 17 of the 26 provide their own local loops to business or residential customers. PNR Report at 23. As illustrated by the maps on the following three pages, competitors have deployed 1,290 miles of fiber in GTE=s Los Angeles franchise, 477 miles of fiber in GTE=s Tampa territory, and 175 miles of fiber in GTE=s Lexington franchise. *Id.* at 11. Likewise, in Myrtle Beach and Oxford Junction, CLECs have almost completely duplicated GTE=s ILEC network, allowing competitors to self-provide both inter-office transport and local loops. A profile of the CLECs operating in the GTE markets surveyed by PNR confirms the breadth of these competitive networks:

- ! AT&T operates one SONET ring in Dallas that also covers Addison, Arlington, Carrollton, Garland, Fort Worth, Irving/Las Colinas, and Richardson; a second SONET ring in Tampa that also covers Clearwater, Sarasota, and St. Petersburg; and a third SONET ring in Los Angeles that also covers Anaheim, Gardenia, Long Beach, Oxnard, Santa Monica, San Bernardino, and Sherman Oaks.
- ! e.spire operates three SONET rings in Dallas that also cover Fort Worth and Irving/Las Colinas, and a SONET ring in Tampa that also covers Westshore and Temple Terrace.
- ! IGC Communications operates a SONET ring in Dallas.
- ! Intermedia operates SONET rings in Dallas, Tampa, and Los Angeles.
- ! KMC Telecom operates a SONET ring in GTE=s Fort Wayne territory.
- ! Level 3 operates SONET rings in both Dallas and Los Angeles.

- ! MCI WorldCom operates one SONET ring that covers the whole Dallas-Fort Worth metropolitan area; a second in Tampa that also covers Clearwater, Hudson, Plant City, St. Petersburg, and Tarpon Springs; and a third in Los Angeles that also covers Anaheim and Irvine.
- ! NextLink operates one SONET ring in Dallas and three in Los Angeles.
- ! Teligent operates extensive broadband fixed wireless networks in Dallas, Los Angeles, and Tampa.
- ! Time Warner Telecom operates a SONET ring in Dallas that also covers Bradenton, Clearwater, Lakeland, Sarasota, St. Petersburg, and Zephyrhills.
- ! USXCHANGE operates two SONET rings in GTE's Fort Wayne franchise.
- ! Winstar operates extensive broadband fixed wireless networks in Dallas, Los Angeles, and Tampa.

There is therefore no question that CLECs can compete effectively in many markets without unbundled access to ILEC transport and loops. The only issue for the Commission is to determine the *characteristics* of markets where these substitutes are available on terms that allow CLECs to compete.

B. CLECs Are Broadly Self-Supplying Transport or Purchasing Transport From Wholesalers in ILEC Wire Centers Serving 15,000 or More Lines. Transport Therefore Should Not Be Subject To an Unbundling Obligation in These Markets.

To guarantee that its unbundling rules do not undermine competition in markets where CLECs can compete effectively using transport substitutes, the Commission should establish a threshold that allows unbundling only in ILEC wire centers too small to support such alternatives.

As a point of departure, both GTE studies and the UNE Fact Report identify an extremely strong correlation between collocation and the presence of transport alternatives. *See* Declaration of Dr.

R. Dean Foreman at 2-4 (filed herewith as Appendix C) (AForeman Declaration \equiv); UNE Fact Report at II-7-9. Once a CLEC collocates, it may deploy its own fiber, purchase transport capacity from wholesale providers, or purchase transport capacity from the ILEC at competitive rates. Foreman Declaration at 3. Furthermore, GTE=s experience has been that CLECs deploy such alternatives in almost every instance of collocation, as only one CLEC has requested unbundled transport in the 141 GTE wire centers with operational collocation. *Id.* Thus, the existence of CLEC collocation indicates that interoffice transport alternatives are available without the need for unbundled ILEC transport. Beyond the existence of substitutes in present markets with collocation, GTE has conducted a study of its own wire centers that identifies the markets where CLECs *would be able* to compete effectively by relying on collocation and the corresponding availability of transport elements. Such an analysis is an integral part of a proper geographic market definition for transport, because unbundled access to ILEC transport is no more necessary to CLECs= ability to compete in markets where substitutes could be used than in markets where substitutes are currently in use.

To determine where CLECs could collocate profitably, and thus take advantage of market alternatives to unbundled transport, Dr. Foreman conducted an econometric study to identify the wire center characteristics that motivate a CLEC decision to collocate. Specifically, Dr. Foreman=s analysis estimates the impact of access line and interoffice trunk density, wire center size, customer mix, the extent to which an area is urbanized, and ILEC network topology on the incidence of collocation. *Id.* Based on the results of a logistic regression, Dr. Foreman concludes

that Acollocation is nearly 18 to 20 times more likely to be observed among wire centers of 15,000 or more lines than in any wire center of smaller size.≡ *Id.* at 7. Raising the bar to wire centers with larger numbers of lines fails to establish a proper geographic market for ILEC transport because it would Aexclude[] many of GTE=s wire centers where collocation has occurred.≡ *Id.* at 8. Indeed, the 15,000 line estimate is conservative because interoffice transport alternatives are available in many smaller markets where collocation may never be observed -- as in Oxford Junction and LaBelle, where GTE=s network has been completely bypassed by CLECs. *Id.* GTE=s experience -- unique among ILECs given the wide variance in the size of its wire centers -- therefore demonstrates that wire centers of 15,000 lines or more share the characteristics necessary to make transport alternatives available to CLECs on competitive terms.

CLECs operating in these markets can secure interoffice transport from many sources. *First*, as illustrated by the above profiles of facilities-based CLECs operating in GTE=s territory, competitors are deploying their own interoffice fiber transport. Since 1996 alone, the number of CLECs that have deployed fiber networks has grown from 29 to 60, and the number of markets served by this fiber has grown from 130 to 289. UNE Fact Report at II-6. With an expected growth rate of 60 percent between 1996 and 2000, the transport market has become one of the fastest growing segments of the telecommunications industry. NECI Report at 30.

Second, CLECs are purchasing interoffice transport from a range of different wholesale suppliers, including other CLECs wholesaling their excess capacity. GST, for example, is pursuing an aggressive wholesaling campaign and plans to resell its interoffice fiber to

Aeverybody in the Los Angeles market in every shape the customer asks for it.≡ PNR Report at 42. Touch America, Williams, Qwest, Metromedia, and Electric Lightwave are likewise wholesaling excess network capacity in markets across the country. NECI Report at 28-29. CLECs may also obtain fiber from electric utilities and cable companies, or from any one of numerous clearinghouses, including Arbinet, AT&T Global Clearinghouse, GRIC Communications, IXTC WwXchange, and Rateexchange RTBX. UNE Fact Report at II-4 n.21. This glut of supply has substantially reduced wholesale transport prices over the last three years. *Id.*

Third, collocating CLECs can purchase transport capacity directly from the ILEC through special access or expanded interconnection agreements -- a substitute for unbundled ILEC transport even under the definition posited by the Commission in the *First Report and Order*. *Id.* at & 285. There is no doubt that CLECs can compete effectively using this substitute, as demonstrated by the fact that only one CLEC operating in GTE=s 141 wire centers with operational collocation has requested unbundled transport. Foreman Declaration at 3. Requiring ILECs to afford CLECs unbundled access to transport will therefore do nothing but reduce by regulatory fiat the price ILECs can charge for transport. But reducing the price of ILEC-provided transport from a competitive price to a TELRIC price would do nothing, as Professor Kahn explains, but undermine CLEC incentives to develop their own substitutes. Kahn Declaration at 17-18.

Finally, new technologies like fixed wireless links allow CLECs to bypass ILEC networks altogether. Companies like Winstar and Teligent have built local networks using predominantly

fixed wireless links in GTE=s Dallas, Los Angeles, and Tampa franchises, PNR Report at 83, 93, while traditional CLECs like NextLink, Sprint, AT&T, and MCI WorldCom are using fixed wireless connections to extend their existing fiber networks. UNE Fact Report at II-11-12. Wireless technology offers these CLECs significant savings. By utilizing wireless alternatives to traditional fiber networks, both Winstar and Teligent are able to offer customers prices 30 percent below those offered by wireline competitors. PNR Report at 85.

GTE=s experience therefore confirms that CLECs have a demonstrated ability to compete effectively in metropolitan markets, and many smaller suburban and rural markets, relying on substitutes to unbundled ILEC transport. CLECs operating in the eight GTE markets studied by PNR that relied on transport substitutes saw their revenues grow as much as 1,747 percent between 1995 and 1998. NECI Report at 33-34. Because CLECs collocating in ILEC wire centers can economically self-supply transport or purchase it from alternative sources -- and because the greatest incidence of collocation takes place in wire centers exceeding 15,000 lines -- the Commission should not require ILECs to unbundle transport in wire centers exceeding this threshold.

C. CLECs Are Self-Providing, or Purchasing From Wholesalers, Myriad ILEC-Loop Alternatives To Serve Large Business Customers and Multiple Dwelling Units. Section 251(d)(2)=s AImpair= Test Therefore Precludes These Business Loops From Being Unbundled.

In the *Notice of Proposed Rulemaking*, the Commission expressed a strong expectation that under any reasonable interpretation of the >necessary= and >impair= standards of section 251(d)(2), loops will be generally subject to the section 251(c)(3) unbundling

obligations.≡ *Second Further NPRM* & 32. While this expectation does accurately reflect the current state of competition in the market for residential and small business loop substitutes,³⁷ it does not accurately reflect the extraordinary level of facilities-based competition for business customers with 20 or more access lines or MDUs.³⁸

Large business customers. CLECs in the eight GTE markets surveyed by PNR are serving large business customers using their own wireline or fixed wireless loops, or loops purchased from wholesalers. Indeed, in the three years since the Act was passed, CLECs have attracted approximately 2.5 million facilities-based lines to their new networks in GTE and RBOC service territories. UNE Fact Report at III-16. Because the characteristics of these large

³⁷ As discussed in section VII below, the entry by AT&T and others into the market for cable-based local service will quickly change this state of affairs.

³⁸ In addition, the Commission cannot legitimately require ILECs to unbundle loop facilities deployed to provide service to new residential or commercial developments. Developers routinely seek competitive bids from ILECs and CLECs to provide service to such developments, and GTE frequently has lost out to CLECs in such competitions. ILECs have no inherent advantage over CLECs in providing service to new developments, and therefore any loop facilities put in place to serve new developments are not critical to CLECs' ability to compete. Indeed, a contrary conclusion would require the Commission to impose ILEC obligations, including unbundling, on CLECs that are awarded contracts to provide service to these new developments. There is simply no rational basis for distinguishing ILEC and CLEC facilities in this context.

business customers -- high revenue potential and call volume concentrated in a single location -- make them attractive candidates for CLECs using loop alternatives wherever they are located, section 251(d)(2)'s Aimpair≡ standard precludes large business loops from being subject to an unbundling obligation.

The Commission has repeatedly concluded that large business customers -- defined as customers with 20 or more access lines≡ -- occupy a discrete telecommunications market.³⁹ This market definition tracks the activity of CLECs serving business customers using substitutes for ILEC loops. For traditional wireline CLECs, 20 lines is generally the point beyond which a customer can be served by a single DS1 line -- a line that can readily be dropped from typical CLEC SONET-ring networks and can be provisioned at far less expense than 20 separate business lines. NECI Report at 34-35. Likewise, fixed wireless networks are ideally suited to serve customers requiring DS1 capacity or greater. *Id.* at 35.

Numerous CLECs are reaching large business customers by building their own fiber networks connecting directly to customer locations. Within the top 50 MSAs, CLECs have deployed over 30,000 miles of fiber. UNE Fact Report at II-6. Forty-three of the top 50 MSAs are served by CLEC fiber networks, and CLECs have deployed fiber in all but 15 of the MSAs

³⁹ *Telecommunications Carriers' Use of CPNI and Other Customer Information*, Second Report and Order and Further Notice of Proposed Rulemaking, 13 FCC Rcd 8061, at & 81 (1998); *see also*, e.g., *Competition in the Interexchange Market*, Notice of Proposed Rulemaking, 5 FCC Rcd 2627, at & 60 (1990).

ranked between 51 and 150. *Id.* Businesses tend to cluster in downtown areas and business parks, and CLECs have deployed ubiquitous fiber networks that target these daytime population centers. *Id.* at III-3. In GTE=s Los Angeles territory, for example, CLEC fiber passes through 91 percent of the zip codes that make up the top 10 percent of all California zip codes measured in terms of daytime population. *Id.* And if large business customers happen to fall outside of these concentrated areas, CLECs widely advertise their willingness to extend their networks directly to these customers= doors. *Id.* In the GTE markets surveyed by PNR, this task is generally not a difficult one. The fiber networks deployed by CLECs in these GTE markets lay within 1,000 feet of a substantial percentage of addressable business customers:

GTE Market	Addressable Market Within 1,000 Feet of CLEC Fiber
Dallas/Fort Worth Area	97%
Tampa Area	27%
Los Angeles Area	25%
Lexington, KY	55%
Fort Wayne, IN	31%
Myrtle Beach, SC	56%

Often, the new loops deployed by these facilities-based CLECs are superior to loops business customers can secure from the ILEC. ILEC loops frequently include loaded copper

pairs that require expensive and time consuming conditioning before they can be used to provide advanced services. NECI Report at 36. The ability of facilities-based CLECs to provide business customers a full range of services -- including digital subscriber line service -- gives these competitors an advantage over ILECs in many markets. Thus, CLECs that have built their own loop facilities -- including 21st Century Telecom, American MetroComm, AT&T, Electric Lightwave, e.spire, GST, NextLink, Ovation, and Touch America -- are seeing their investments translate into extraordinary revenue growth and rapidly expanding market capitalization. *Id.* at 42, 58-59, Attachment F.

CLECs are also reaching large business customers through microwave and fixed terrestrial wireless connections which, as the Commission has recognized, offer Aa replacement for the >last mile= of copper wire.⁴⁰ These fixed wireless loops are already inexpensive to deploy relative to traditional wireline loops -- which cost roughly \$1,000 per customer -- and these deployment costs are expected to drop as low as \$200 per subscriber. UNE Fact Report at III-10. Moreover, the costs of these wireless loops are not distance sensitive, and almost every business in a license area can be reached as soon as service is activated. *Id.* Roll-out times run as short as 90 days, and fixed wireless loops are scalable and less expensive than wireline loops to maintain. *Id.* These loops also offer greater capacity than a standard copper loop with equivalent or better quality of service and speed. Thus, suppliers of wireless local loop platforms like Nortel and Lucent tout the fact that such systems are Amodular≡ and readily allow CLECs

⁴⁰ *In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Third Report and Order, 13 FCC Rcd 19,746, at F-1 (1998).

to Aadd capacity and capabilities when and wherever required≡ and Acustom tailor . . . network design to meet . . . marketplace opportunities.≡ *Id.* at III-10 n.21 (citation omitted).

Many of the largest CLECs have already obtained wireless facilities (including licenses) to extend their fiber networks. AT&T holds 38 GHz licenses in over 200 geographic areas, including more than 95 of the largest 100 metropolitan markets. *Id.* at III-10. MCI WorldCom has recently invested nearly \$700 million to obtain fixed wireless connections to complement its local fiber networks. *Id.* Sprint has made four recent fixed wireless acquisitions that it plans to use to provide access to its ION network. *Id.* Other major providers of wireless local loop services include Winstar, Teligent, NextLink, and Advanced Radio Telecom. *Id.* Like CLECs deploying their own traditional wireline loops, these competitors are experiencing substantial growth in both revenues and market capitalization. NECI Report at 42, 58-59, Attachment F.

In addition to deploying their own facilities, CLECs can also purchase large business customer loops from a number of wholesale providers. These wholesalers typically serve a broad range of markets. Winstar, for example, offers wholesale service in Atlanta, Baltimore, Boston, Chicago, Dallas, Detroit, Fort Worth, Houston, Los Angeles, Milwaukee, New York, Newark, Oakland, Philadelphia, Phoenix, San Diego, and Washington, DC and is planning to expand its wholesale service into seven new markets. NECI Report at 45. Additional loop wholesalers like Metromedia Fiber Networks and Time Warner serve these and other markets across the country. *Id.*

CLECs looking for alternatives to ILEC loops therefore have a broad range of self-provision and wholesale options available on terms that allow them to compete. Indeed, as stated

above, CLECs are currently serving approximately 2.5 million lines with their own facilities in GTE and RBOC territories -- a count that gives CLECs a large business market penetration rate as high as 25 percent within ILEC wire centers that have 20,000 lines or more and one or more CLECs with collocation. UNE Fact Report at III-14-17. Given that numerous CLECs have demonstrated an ability to compete for large business customers using their own traditional wireline or fixed wireless loops or purchasing loops from wholesale providers, the facts do not support the Commission's tentative conclusion that the Act requires loops to be unbundled for all types of customers. Rather, section 251(d)(2)'s Aimpair≡ test -- which only affords CLECs access to an element if there are no competitively viable substitutes available in the marketplace -- precludes large business loops from being subject to an unbundling obligation.

Multiple Dwelling Units. The same conclusion holds true for multiple dwelling units. Many CLECs, including Teligent, 21st Century, OnePoint, Cox Communications, Comcast, and StarPower (the RCN/Pepco venture) have been targeting apartment buildings throughout the country. The reason is simple. AFor competitors, MDUs represent an attractive market because they can be served for significantly less cost than single-family residences. In many cases, they also mean capturing a market that has shown a willingness to pay for high-end services.⁴¹ Indeed, CLECs enjoy such substantial efficiencies from serving MDUs that they can dramatically

⁴¹ V. Vittore, ANon-traditional carriers bring MDUs up to speed,≡ <<http://www.internettelephony.com/archive/internet1998/3.16.98ie/vittore.html>> (AVittore≡). See also P. Farhi, AFears Rise of a >Digital Divide,≡ *Washington Post*, May 25, 1999, at E1, E13 (A[Comcast] has limited itself to apartment buildings, where I can snag multiple customers at relatively lost cost.≡).

undercut ILEC rates. Among the advantages MDU specialists tout is the ability to deliver multiple services to a concentrated customer base, with operating efficiencies that allow retail discounts in the 20 percent to 33 percent range.⁴²

Many of these companies use their own facilities B generally fiber or LMDS spectrum B to provide a bundle of services to MDU residents, including local telephony, long distance, high-speed Internet access, and cable. For example, in Chicago, 21st Century Ahas built a fiber backbone alongside the [Chicago Transit Authority=s] rights of way By brining fiber directly into most of the buildings it wants to serve, the company can offer customers a menu of choices, including several flavors of high-seed data.⁴³

⁴² G. Kim, AMDU Sweet MDU,≡ <<http://www.firstregional.net>> (posted Nov. 15, 1998) (AMDU Sweet MDU≡).

⁴³ Vittore, *supra*.

Moreover, CLECs serving MDUs have been phenomenally successful. In Orange County, California, for example, Cox Communications is A[e]mploying its existing fiber network and Northern Telecom access nodes≡ and Ahas captured huge shares of the telephone market in newly built MDUs where it offers service. In the four buildings where it offers a packaged service of video, high-speed data and voice, Cox is serving 95 percent of the residential telephony customers.≡⁴⁴ OnePoint, a CLEC operating in numerous cities throughout the country, Acurrently averages more than \$130 a month revenue from [each of] its 158,000 customers≡ and expected to serve 200,000 customers by November 1998.⁴⁵ RCN, a CLEC operating in the boston to Washington D.C. corridor, anticipated growing from 268,000 to 885,000 connections in 1998.⁴⁶

Notably, CLEC interest in MDUs extends well beyond the largest apartment buildings. 21st Century serves buildings with fewer than 100 units; indeed, in larger buildings it deploys its own system node right in the building.⁴⁷ More than 25 million housing units are located in buildings with more than 50 units each, and the marketing director of First Regional Telecom, a CLEC that focuses on MDUs, characterizes this market as Ahighly profitable if done

⁴⁴ Vittore, *supra*.

⁴⁵ AMDU Sweet MDU,≡ *supra*.

⁴⁶ AMDU Sweet MDU,≡ *supra*.

⁴⁷ B. Quinton, 21st Century Rocks,≡ <<http://internettelephony.com>> (cover story, March 1, 1999).

properly.⁴⁸ Not surprisingly, then, the Yankee Group estimates that, by the year 2000, More than half of those households [in MDUs] will be able to choose telephone service from a CLEC.⁴⁹

As these facts make clear, CLECs are able to compete effectively to serve the MDU market without reliance on ILEC loop facilities. No impairment results, therefore, under any reasonable interpretation of section 251(d)(2), by excluding ILEC loops used to serve MDUs from section 251(c)(3)'s unbundling requirement.

V. SECTION 251(d)(2)'S IMPAIRMENT TEST JUSTIFIES AFFORDING CLECs ACCESS TO ILEC OPERATIONS SUPPORT SYSTEMS ONLY WHEN CLECs ARE RESELLING ILEC SERVICE OR PURCHASING UNBUNDLED ILEC ELEMENTS.

ILEC operations support systems support pre-ordering, ordering, provisioning, repair and maintenance, and billing processes. GTE recognizes that CLECs may need access to the information and capabilities contained in ILEC OSS effectively to provide services that are purchased from the ILEC. For example, a CLEC planning to serve a customer using ILEC resold service will need pre-ordering information to initiate the process and access to the ILEC system to place the order. CLECs using ILEC unbundled network elements may also need access to at

⁴⁸ AMDU Sweet MDU, *supra*.

⁴⁹ R. King, ACLECs play with building blocks, <http://www.zdnet.com/intweek/stories/news/0,4164,378015,00.html> (posted Dec. 14, 1998).

least some ILEC OSS, such as pre-ordering information, ordering capabilities, and maintenance and repair. Thus, GTE agrees that CLECs who are reselling ILEC services or buying unbundled network elements should have access to ILEC wholesale OSS in conjunction with the provision of such services or elements.

However, retail use of ILEC OSS by CLECs to provide service to their customers should not be required. When CLECs are providing services that are not derived in any way from ILEC systems, their OSS needs can readily be met by substitutes that are widely available in the marketplace. No fewer than 19 different vendors -- including Lucent, IBM, Nortel, and Ascend -- market database systems and other products to CLECs to perform all OSS functions. NECI Report at 56-58. For example, Lucent offers to CLECs of all sizes an OSS platform that allows competitors to support their service management process from start to finish. *Id.* at 53. Harris provides a Remote Test Unit which allows CLECs to perform automatic testing on unbundled loops and trunks. *Id.* at 52. Gensym markets to CLECs software that provides comprehensive support for billing and auditing. *Id.* These systems are readily scalable and can therefore be used by both large and small competitors.

The market for CLEC OSS is growing at an extraordinary rate, and new products are constantly under development to further improve the OSS functionality available to CLECs. Telcordia, for example, plans to roll out in the next 12 months products that provide a full suite of OSS services and support both IP-based and circuit-switched networks, and allow CLECs to integrate their OSS seamlessly with ILEC systems. *Id.* at 53. Innovations like these are being driven by the considerable CLEC demand for these services. In the eight GTE markets studied

by PNR, no fewer than 10 CLECs -- including AT&T, Frontier, MCI WorldCom, and Teligent -- are self-providing their own OSS. PNR Report at 23. This demand is in turn driving up the revenues earned by manufacturers supplying CLEC OSS -- revenues that have grown to over \$20.7 billion annually since the Act was passed. NECI Report at 56. Given the success of CLECs that self-supply their own OSS, and the success and continuing innovation of firms that supply CLEC OSS, section 251(d)(2) precludes CLECs from securing unbundled access to ILEC OSS except in conjunction with the resale of ILEC services or the purchase of another unbundled ILEC element.

VI. MANDATING ACCESS TO ADDITIONAL UNBUNDLED NETWORK ELEMENTS WOULD VIOLATE THE ACT.

The Commission has asked whether it should require ILECs to afford CLECs access to certain unbundled network elements beyond those previously specified in Rule 319. *Second Further NPRM* §§ 30-32. As demonstrated in detail below, there is no legal basis for mandating unbundled access to any of the facilities cited by the Commission. In some cases, such as inside wire and dark fiber, the facilities proposed by the Commission do not meet the definition of a network element. In other instances -- such as requiring ILECs to make conditioned loops available to CLECs or to combine elements they do not already combine -- the Commission's proposals are inconsistent with the plain meaning of the Act as interpreted by the Eighth Circuit. And, in any event, none of the facilities about which the Commission has requested comment satisfies section 251(d)(2)'s "do not impair" standard. Rather, all of these facilities are readily available through self-supply or from sources other than the ILEC, and competitors can and do use those alternatives to enter the market quickly and effectively.

A. ILEC Network Elements Used To Provide Advanced Services Do Not Satisfy Section 251(d)(2)'s "Do Not Impair" Standard.

Although the Commission has already received comments on whether elements used to provide advanced services should be unbundled, the *Notice of Proposed Rulemaking* seeks additional comment in light of the Supreme Court's decision in *Iowa Utilities Board*. *Second Further NPRM* § 35. Due to the wide availability of advanced services equipment and CLEC and cable company leadership in the deployment of advanced services, ILECs cannot be required to unbundle elements that support advanced services, including digital subscriber line access

multiplexers (ADSLAMs \cong) and packet switches. Without a doubt, CLECs will not be Aimpaired \cong in their ability to provide advanced services without access to these elements.

1. ILECs Are Not Incumbents in the Advanced Services Market.

Unlike basic telephone services, advanced services have always been provided in a competitive and dynamic market. Although these services may be delivered over existing transmission channels, such as telephone loops and cable television fiber, the equipment used to increase the capacity of those facilities is new and used solely to provide advanced services. In addition, these services are being introduced by CLECs, cable companies, and ILECs simultaneously. Thus, as the Commission itself has noted, there is no incumbent dominating the market.⁵⁰

⁵⁰ See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Report, CC Docket No. 98-146, at & 48 (Feb. 2, 1999) (AAdvanced Services Report≡).

Cable company and CLEC deployment of advanced services already dwarfs the availability of these services from ILECs. As demonstrated by the UNE Fact Report, CLEC xDSL and cable modem service are available in many more cities than ILEC xDSL service. UNE Fact Report at VI-3, Maps 1 & 2. Moreover, according to the National Cable Telephone Association, A[c]able=s superior bandwidth enables significantly faster transmission speed than traditional telephone lines (50 to 100 times faster than telephone-based modem technologies), and the cable connection does not interfere with normal telephone activity or usage,⁵¹ giving such services an advantage over ILEC advanced services. As a result of this advantage -- combined with the fact that cable-based broadband services are typically less expensive than ILEC xDSL offerings -- cable operators Ahave captured an early lead in the race to offer consumers high-speed access to the Internet.⁵² In 1998, cable companies provided cable Internet services to over 100 U.S. markets, passing 19.5 million homes. This number is expected to grow to more than

⁵¹ *High Speed Internet Access*, Cable Television Industry Year-End Review at 1 <http://www.ncta.com/yearend98_3.html> (visited May 11, 1999.).

⁵² Steve Rosenbush, *US West to slash price of speedy Net service*, USA Today, May 5, 1999, at 1B.

67 million homes by the year 2005.⁵³ Cable companies expect to have one million cable modem subscribers in 1999, compared with only 300,000 xDSL subscribers for ILECs.⁵⁴

⁵³ *High Speed Internet Access*, Cable Television Industry Year-End Review, at 1.

⁵⁴ Rosenbush, *US West to slash price of speedy Net service*, at 1B.

Similarly, CLECs are also investing significant resources in an effort to dominate the advanced services market. According to Terry Barnich of New Paradigm Resources Group, A[b]y leveraging their infrastructure investments to deliver bandwidth, CLECs have positioned themselves to rule the data market. By 2001, CLEC data services will be valued at \$44 billion or more -- twice the size of competitive switched voice and representing more than half of the total estimated \$83 billion CLEC marketplace.⁵⁵ The Association for Local Telecommunications Services, a CLEC trade association, claims that CLECs have already surpassed ILECs in providing advanced services over ILEC loops and that CLECs are driving the deployment of cutting-edge technology.⁵⁶ Numerous carriers are actively deploying networks throughout the country. For example, Covad is already providing service in 10 MSAs and expects to expand to 51 MSAs nationwide.⁵⁷ Similarly, NorthPoint is operating in 17 markets and will add an additional 28 markets by the end of this year.⁵⁸ Other companies, such as Concentric Network Corp., Network Access Solutions, Rhythms Net Connections, and Intermedia are also expanding their networks and offering services throughout the United States.

⁵⁵ Press Release, *1999 Annual CLEC Report Sees Continuing Explosive Data Growth in Competitive Local Telecom Industry* (May 11, 1999) <<http://www.alts.com/99release.html>> .

⁵⁶ Press Release, *ALTS= Fall Education Seminar Proves Success of Telecom Act in Stimulating Broadband Data and Competitive Providers* (Sept. 18, 1998) <<http://www.alts.com/99release.html>> .

⁵⁷ Press Release, *Covad Brings Its Nationwide High-Speed Internet Access Network to San Diego; Covad Makes the Internet Faster and Easier With Speedy, Always On DSL Connections* (May 5, 1999) <http://www.covad.com/about/press_releases/press_050599.html> .

⁵⁸ Press Release, *NorthPoint Communications Begins Trading on NASDAQ* (April 15, 1999) <http://www.northpoint.net/press/press_990505.html> .

With CLEC and cable company deployment of advanced services ahead of that of ILECs, there is no basis for considering ILECs as incumbents in this market or assuming that ILECs have any advantage in the provision of these services.

In GTE=s operating territory, for example, AT&T and MGC Communications (among many other CLECs) have the capability to offer advanced services. AT&T has two digital class-five switches and SONET rings serving the entire Dallas/Fort Worth metroplex area. PNR Report at 29. This backbone runs at speeds of up to OC48. Furthermore, in GTE=s Los Angeles and Tampa markets, AT&T also has deployed a similar architecture utilizing SONET rings and digital switches. *Id.* More importantly, AT&T=s planned acquisition of MediaOne will provide it with expanded access to GTE=s Los Angeles market where the combined entity can leverage its cable facility assets to provide an integrated cable, telephony, and Internet access offering. *Id.* at 28.

MGC Communications is also well positioned to offer advanced services in GTE=s Los Angeles market where it already has deployed two Nortel DMS 10S digital switches and has requested over 50 collocation arrangements. In April 1999, MGC announced that it plans to utilize the proceeds from a placement of \$47.5 million in convertible stock to roll out digital subscriber line high-speed services. *Id.* at 69. Numerous other CLECs -- including Allegiance Telecom, Cox Communications, e.spire, Hyperion, and Teligent -- are likewise deploying the facilities required to provide advanced services in markets throughout GTE=s service territories. *Id.* at 4, 31, 33, 50, 85.

2. CLECs Are Not AImpaired≡ Without Access To ILEC Advanced Services Equipment.

With CLEC deployment of advanced services leading that of ILECs and the wide availability of advanced services equipment, there is no basis for concluding that CLECs are Aimpaired≡ in their ability to offer advanced services without access to ILEC equipment. As GTE has explained in its prior pleadings, the only network element that CLECs may require access to in order to provide advanced services is loops,⁵⁹ and this access will be necessary only where CLECs need access to ILEC loops generally.⁶⁰

CLECs will not be at all impaired without access to ILEC advanced services equipment, such as DSLAMs and packet switches. This equipment is widely available in a competitive market at low cost. Alcatel, Cisco, Fujitsu, and Lucent all provide DSLAMs to both ILECs and CLECs and have sold more equipment to CLECs than to ILECs. *Advanced Services Report* && 53, 56, 58. In fact, the Commission=s recent *Advanced Services Report* confirmed that CLECs have deployed more advanced service equipment than ILECs over ILEC loops than ILECs have themselves. *Id.* In GTE=s service areas, for example, Covad and NorthPoint have requested collocation in over one hundred GTE central offices to install advanced services equipment, such as DSLAMs. DSLAM hardware is highly scalable, with mounting cabinets

⁵⁹ Comments of GTE, CC Docket No. 98-147 at 103 (filed Sept. 25, 1998).

⁶⁰ As explained below, ILECs should be required to provide conditioned loops only in those areas where the ILEC provides conditioned loops for its own use.

available to accommodate as few as eight subscribers in a central office. This hardware costs approximately \$1,000 per DSL subscriber for small units (eight subscribers) and the price drops appreciably when larger units are deployed. As evidenced by the number of CLECs providing advanced services, equipment used to provide these services is both scalable and cost-effective.

CLECs are also deploying packet switches in significant numbers. UNE Fact Report at I-33. As explained above, CLECs have largely bypassed ILEC circuit switches in favor of installing their own packet switches throughout the United States. Packet switches are even easier for CLECs to deploy because they are more cost-efficient. *Id.* at I-34. Recent switching advances have continued to reduce start-up costs. For example, the Lucent Technologies PathStar Business Service Exchange, which provides both voice and data over IP or ATM packet networks, will be available starting in July 1999, with entry level configurations costing only \$100,000. NECI Report at 21. Industry analysts expect that packet switching costs will continue to drop. *Id.* Because of the cost-effective nature of packet switching, CLECs are aggressively deploying these types of networks. For example, AT&T has stated that it will have local ATM connectivity in 41 cities nationwide by the end of 1999. UNE Fact Report at I-33 n.98. Further, GST Telecommunications, a CLEC that operates primarily on the West Coast in GTE territory, has 24 frame relay switches in operation and, as of December 31, 1998, had 22 ATM switches deployed throughout its network.⁶¹ Thus, as with circuit switching, CLECs are not Aimpaired≡ without access to ILEC packet switches.

⁶¹ GST Telecommunications, SEC Form 10-K, at 4 (year ending Dec. 31, 1998).

With access to ILEC loops, where necessary, the wide availability of advanced services equipment, and the ability to collocate, CLECs are easily able to offer advanced services and have done so more aggressively than ILECs. The Commission's recent collocation rules, though unnecessarily intrusive, will make it even easier for CLECs to collocate advanced services equipment. In addition, recent developments, such as carrier hotels run by independent companies facilitate collocation by allowing numerous carriers of all sizes to collocate in one building. NECI Report at 30-31. The fact that CLECs are leading ILECs in the advanced services market is proof in itself that access to ILEC advanced services equipment is unnecessary for CLECs to compete effectively in this market.

In the context of a new market, such as advanced services, a sharing requirement will have an even greater dampening effect on competition than in an established market. When a network sharing requirement was suggested for AT&T and TCI in their recent merger, AT&T Chairman C. Michael Armstrong explained that A[n]o company will invest billions of dollars to become a facilities-based broadband services provider if competitors who have not invested a penny of capital nor taken an ounce of risk can come along and get a free ride on the investments and risks of others.⁶² Advanced services are a new market for ILECs -- just like AT&T, they will not be willing to make the necessary investments to provide these services if they have to share the benefits with any competitor who asks. Under these circumstances, an unbundling rule will result in less innovation and will deprive consumers of valuable new services.

⁶² *FCC is Told TCI Should Unbundle Network in Merger with AT&T*, Warren's Cable Regulation Monitor (Nov. 23, 1998).

B. The Commission Cannot Mandate Access To Dark Fiber Because It Does Not Meet the Definition of a Network Element and CLECs Are Not Impaired Without Access To It.

In the *Notice of Proposed Rulemaking*, the Commission asks if technological advances support modifying the definition of loops or transport to include dark fiber. *Second Further NPRM* & 34. Because dark fiber is not a network element and because ILECs have no inherent advantage in installing fiber even if it were, unbundling cannot be mandated.

1. The Definition of A Network Element Excludes Facilities Not Used To Provide Service.

The Commission may not require ILECs to provide dark fiber on an unbundled basis because the Act's plain language excludes dark fiber from the definition of A network element. Section 3(29) of the Act defines a A network element as a A facility or equipment *used in* the provision of a telecommunications service (emphasis added). The very nature of dark fiber, however -- the reason it is A dark -- is that it is not used in providing service. Rather, dark fiber consists of strands of glass in the ground that are unattached to the requisite electronics and carry no signals. Technological advances have not changed this basic fact.

Notably, several sophisticated state commissions have endorsed this analysis in concluding that dark fiber is not a network element. For example, a California arbitrator stated that A[d]ark fiber is not a network element within the meaning of Section 3(29) of the Act, since

by definition it is not used in the provision of telecommunications service.⁶³ Similarly, the New

York Public Service Commission determined that:

[D]ark fiber is not an element. New York Telephone should not have to lease facilities against its will when it is not in the business of providing facilities (as opposed to services and service networks) to competitors. Such a requirement could interfere unreasonably with New York Telephone=s investment and construction plans. Moreover, it could provide an unreasonable disincentive to competitive carriers to enter into facilities-based competition.⁶⁴

⁶³ *Petition of AT&T Communications of California, Inc. for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Pacific Bell*, Arbitrator=s Report, Application 96-08-040, at 25 (Oct. 31, 1996), *approved agreement based on Arbitrator=s Report*, Decision 96-12-034 (Aug. 20, 1996).

⁶⁴ *Petition of AT&T Communications of New York, Inc. for Arbitration of an Interconnection Agreement with New York Telephone Company; Petition of New York Telephone Company for Arbitration of an Interconnection Agreement with AT&T Communications of New York, Inc.*, Cases 96-C-0723, 96-C-0724, Order No. 96-31, 1996 N.Y. PUC LEXIS 704, at 70 (Nov. 29, 1996).

The Florida and Pennsylvania commissions have reached the same conclusion.⁶⁵

⁶⁵ See *Petitions by AT&T Communications of the Southern States, Inc., MCI Telecommunications Corporation and MCI Metro Access Transmission Services, Inc., for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE Florida Incorporated Concerning Interconnection and Resale Under the Telecommunications Act of 1996*, Docket Nos. 960847-TP, 960980, Order No. PSC-97-0064-FOF-TP, 97 FPSC 1:263, 282 (Jan. 17, 1997) (stating A[u]pon consideration of the evidence, we find that dark fiber shall not be classified as a network element, as defined by the Act, because it is not used in the provision of a telecommunications service \cong); *Petition of MCI Metro Access Transmission Services, Inc. for Arbitration of Its Interconnection Request to Bell Atlantic-PA, Inc.*, Docket No. A-310236F0002, 116 Pa. PUC LEXIS 169, *33 (Dec. 20, 1996) (agreeing with Bell Atlantic-PA that Adark fiber, which is spare fiber optic cable owned by Bell with no electronics attached to it, is not a network element under the Act and is not subject to unbundling \cong).

2. Even If Dark Fiber Were a Network Element, it Does Not Meet Section 251(d)(2)'s Impairment Standard.

Independent of whether dark fiber meets the definition of a network element, dark fiber is widely available in the market and thus fails to satisfy section 251(d)(2)'s impairment test. As explained above, numerous carriers are laying fiber throughout the United States. Indeed, CLECs are laying fiber at a faster rate than ILECs. New Paradigm Group estimated that CLECs deployed 78,506 fiber miles by the end of 1997. UNE Fact Report at III-27. In addition, Corning, one of the largest fiber suppliers, states that CLEC demand for fiber increased by 45 percent in 1998, compared with an increase of only 10 percent for ILECs. *Id.*

There is also a wholesale market for dark fiber. Companies such as Frontier, GST, IXC, Level 3, Metropolitan Fiber Networks (AMFN), Qwest, and Williams lease their excess capacity. *Id.* at III-25. Likewise, utility companies are deploying fiber, both in partnership with CLECs and on their own. Taking just one example, MFN, a publicly traded company that specializes in the provision of dark fiber capacity, has installed local intra-city networks that, by the end of 1998, had 160,000 fiber miles covering over 400 route miles in four major metropolitan areas (New York, Philadelphia, Washington D.C. and Chicago). Expansion plans in these four areas will bring the total infrastructure in these markets to approximately 357,000 fiber miles covering 846 route miles. In addition, MFN has begun laying fiber in the San Francisco and Boston markets, with plans for expansion into the Los Angeles, Seattle, Dallas,

Houston and Atlanta areas within two years.⁶⁶ Financing for this expansion was obtained through the November 25, 1998 issuance and sale of \$650 million of Senior Notes.⁶⁷

The capital markets therefore believe that dark fiber is a commodity that can be provided by companies such as MFN on a competitive basis with the ILECs. Indeed, the Enron Corporation recently unveiled plans to create a market to trade communications capacity . . . through a standard contract, similar to those used in trading orange juice, soybeans, and natural gas.⁶⁸ This kind of commoditized trading will allow CLECs to customize the amount of bandwidth available to them at any particular time,⁶⁹ guaranteeing a ready source of non-ILEC supply. CLECs cannot therefore be impaired in their ability to provide service without access to ILEC fiber.

Even if the Commission were to conclude that dark fiber is a network element and meets the impairment standard, it should nevertheless not require ILECs to provide it on an

⁶⁶ Metropolitan Fiber Networks, SEC Form 10-K, at 4 (year ending Dec. 31, 1998).

⁶⁷ *Id.* at 6.

⁶⁸ Kathryn Kranhold, *Enron Planning to Create a Market to Trade Communications Capacity*, Wall St. J., May 20, 1999, at A11.

⁶⁹ *Id.*

unbundled basis. ILECs must fulfill their state obligations as carriers of last resort, providing service to any and all customers as the need arises within a reasonable time frame. By having dark fiber in reserve, ILECs can respond to increases in consumer demand. If the facilities are not available to satisfy these needs, ILECs will be forced to construct new facilities swiftly and on short notice, which will increase both the costs of construction and the length of time customers will wait for service. Moreover, if ILECs construct facilities that a competitor may take at will, ILECs will be discouraged from engaging in necessary long-term business planning because they cannot enjoy the fruits of their investments. With ample numbers of firms installing fiber, there is no reason to force ILECs to serve as construction companies for CLECs.

C. Section 251(c)(3) Does Not Obligate ILECs To Combine Network Elements They Do Not Already Combine.

The Commission also requests comment on whether ILECs can be required to combine unbundled network elements that they do not already combine.≡ *Second Further NPRM* & 33.

This question already has been answered in the negative by the Eighth Circuit when it vacated Rule 315(c). That rule provided that an incumbent LEC shall perform the functions necessary to combine unbundled network elements in any manner, even if those elements are not ordinarily combined in the incumbent LEC's network.≡ As the Eighth Circuit noted, the plain language of the Act indicates that the requesting carriers will combine the unbundled elements themselves.≡ *Iowa Utils. Bd. v. F.C.C.*, 120 F.3d 753, 813 (8th Cir. 1997). The Commission did not appeal that ruling and the Supreme Court's decision in *Iowa Utilities Board* did not affect the Eighth Circuit's determination. While the Court stated that ILECs may not disassemble

elements that already are combined, it neither expressly nor implicitly suggested that ILECs have an affirmative duty to combine unbundled network elements at a CLEC=s behest. *Iowa Utils. Bd.*, 119 S. Ct. at 736-38.

Requiring ILECs to combine elements that they do not already combine would also be inconsistent with the statute=s parity of service requirements. The non-discrimination language in section 251(c)(3) cannot be read to compel ILECs to provide CLECs access to service or facilities that ILECs do not provide for themselves. In this regard, the Eighth Circuit observed that:

AThe fact that interconnection and unbundled access must be provided on rates, terms, and conditions that are nondiscriminatory merely prevents an incumbent LEC from arbitrarily treating some of its competing carriers differently than others; it does not mandate that incumbent LECs cater to every desire of every requesting carrier.≡ *Iowa Utils. Bd.*, 120 F.3d at 813.

Such catering, of course, is precisely what the Commission seeks comment on here.

Finally, even if forcing ILECs to combine network elements in any manner requested by a CLEC were consistent with section 251(c)(3), such a requirement would not satisfy section 251(d)(2)=s Aimpair≡ standard. *First*, and dispositively, CLECs are free to combine ILEC unbundled network elements themselves, as contemplated by the Act. *Second*, there are substitutes available in the market for many of the combinations of interest to CLECs. For example, in the *Notice of Proposed Rulemaking*, the Commission asks specifically about CLECs= ability to combine unbundled loops and transport. *Second Further NPRM* & 33. Both special access and intraLATA private lines can be provisioned to provide the same functionality as an

unbundled loop combined with transport. Since CLECs can create any combination of elements either themselves or by purchasing services that provide similar functionality, there is no basis for concluding that a CLEC would be impaired if ILECs do not combine network elements on its behalf.

D. While the Act Precludes the Commission From Requiring ILECs To Provide xDSL Conditioned Loops, Nothing Limits the Commission's Ability To Encourage ILECs and CLECs To Negotiate Appropriate Terms and Conditions in Their Interconnection Agreements.

In the *Notice of Proposed Rulemaking*, the Commission stated that Nothing in the statute or the Supreme Court's opinion . . . preclude[s] us from requiring that loops that must be unbundled must also be conditioned in a manner that allows requesting carriers supplying the necessary electronics to provide advanced telecommunications services.⁷⁰ *Second Further NPRM* & 32. This conclusion is contrary to the Act. Section 251(c)(3) requires ILECs to provide access to network elements on a nondiscriminatory basis. On its face, this section does not compel an ILEC to provide different or better facilities to CLECs than the ILECs provides for their own use.

⁷⁰ GTE interprets Aconditioning to mean the removal of any existing load coils and bridge taps. In addition, a two-wire Digital Loop, dependent on loop make-up, may be configured to support Enhanced Copper Technologies, such as ADSL. When using ADSL technology, the CLEC is responsible for limiting the Power Spectral Density of the signal to levels specified in Clause 6.13 of the ANSI T1.413 ADSL standard.

In the *First Report and Order*, the Commission adopted Rule 311, which obligated ILECs to provide CLECs with network elements Asuperior in quality to that which the incumbent LEC provides to itself.≡ However, the Eighth Circuit concluded that this rule was inconsistent with the Act, holding Athat subsection 251(c)(3) implicitly requires unbundled access only to an incumbent LEC=s existing network -- *not to a yet unbuilt superior one.*≡ *Iowa Utils. Bd.*, 120 F.3d at 813 (emphasis added). This ruling was not disturbed by the Supreme Court=s decision. Therefore, the Commission=s conclusion that the Act does not preclude it from forcing ILECs to provide conditioned loops is incorrect.

Nevertheless, in markets where GTE does not provide conditioned loops to itself, it does provide such loops through a wholesale tariff. Moreover, GTE does agree that, where an ILEC is otherwise required to unbundle loops and provides conditioned loops to itself, the Commission could require that conditioned loops be unbundled. This obligation should be imposed on a central off-by-central office basis: if an ILEC provides conditioned loops to itself in a particular central office, CLECs could secure unbundled access to conditioned loops in that office pursuant to section 251(c)(3). There is therefore no situation in which CLECs requiring access to conditioned loops could not procure them from GTE where technically feasible.

E. A Mandatory Nationwide Requirement for Sub-Loop Unbundling Is Contrary To the Act, Unnecessary, and Raises Technical and Network Integrity Issues.

The Commission requests comment on whether, as a result of technology changes, it should require sub-loop unbundling at the remote terminal or at other points in the ILEC=s

network.⁷¹ Because sub-loop unbundling does not meet section 251(d)(2)'s Aimpair≡ standard, the Commission may not order such unbundling. As an initial matter, in areas where access to unbundled loops does not meet the statutory standard, *a fortiori* sub-loop unbundling also cannot be ordered since the finding that loops are unnecessary presumes the existence of competitive alternatives. Likewise, in areas where CLECs require access to unbundled loops, mandatory sub-loop unbundling is unnecessary because CLECs can take the whole loop and will not be impeded from providing competitive service.

⁷¹ *Second Further NPRM* & 33. As GTE will explain in its comments on the Advanced Services Further Notice, *see Deployment of Wireline Services Offering Advanced Telecommunications Capability*, First Report and order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147 (rel. Mar. 31, 1999), spectrum unbundling should not be considered sub-loop unbundling, and loop spectrum is not a network element.

In addition, even if sub-loops met the section 251(d)(2) standard, which they do not, sub-loop unbundling continues to raise complex technical, administrative, and operational issues.⁷² There are dozens of different loop configurations, each with a distinct combination of network elements and technologies. Because of this, access at the sub-loop level must be evaluated on a case-by-case basis to determine whether access is feasible and whether the requesting carrier is willing to compensate the ILEC for the required work. For example, sub-loop unbundling might be accomplished via collocation of CLEC equipment such as a digital loop carrier (ADLC≡) cabinet at remote terminals or via the placement of CLEC facilities at an adjacent location close to, but outside of, the ILEC remote terminal. Both of these approaches may encounter difficulty depending on the network configuration involved. With the collocation alternative, space availability may be an issue because many first generation DLCs do not have any extra space within the cabinet to accommodate the placement of CLEC equipment. Similarly, the placement of CLEC facilities adjacent to the ILEC's remote terminal may raise issues related to rights-of-way, zoning restrictions, local ordinances, and power supply that need to be evaluated and resolved to determine if access is indeed feasible. Therefore, sub-loop unbundling is entirely unsuited for rules of nationwide applicability and should be addressed through a bona fide request process, in which the ILEC evaluates whether a specific request is

⁷² The Commission considered this issue in the first Local Competition proceeding and declined to require sub-loop unbundling because of the practical implications for network reliability and service integrity. *First Report and Order* & 391. Because technological changes have not resolved these problems, a nationwide sub-loop unbundling requirement is still unwarranted.

a realistic alternative. This approach is already being utilized in 172 of the interconnection agreements that GTE has in place with CLECs.⁷³

F. Inside Wire on the Customer=s Side of the Demarcation Point Is Not a Network Element≡ and Therefore Cannot Be Subject To an Unbundling Obligation.

The *Notice of Proposed Rulemaking* seeks comment on Asituations where the incumbent LEC owns facilities on the end user=s side of the network demarcation point and whether those facilities should be unbundled under section 251(c)(3).≡ *Second Further NPRM* & 33. There is no legal or practical basis for the Commission to impose an unbundling requirement on ILECs for these facilities.

First, by definition, facilities on the *customer=s* side of the network demarcation point are not network elements. The demarcation point is Athe point at which the telephone company=s facilities and responsibilities end and customer-controlled wiring begins.≡⁷⁴ Since the ILEC=s

⁷³ GTE has offered sub-loop unbundling via a bona fide request process for two and one-half years. To date, GTE has received no firm requests from CLECs responding to this offering.

⁷⁴ *Review of Sections 68.104 and 68.213 of the Commission=s Rules Concerning Connection of Simple Inside Wiring to the Telephone Network*, 12 FCC Rcd 11897, at & 1 (1997) (ADemarcation Point Reconsideration Order≡).

network facilities end at the demarcation point, any facilities on the customer=s side of that point are not part of the ILEC network and thus cannot be a network element.

Second, even if inside wiring were a network element, it plainly does not meet section 251(d)(2)=s Aimpair= test. The market for telephone inside wiring installation and maintenance is robustly competitive, and consumers have many choices among such providers. Indeed, the Commission=s stated objective in detariffing inside wire more than 10 years ago was to Afoster competition in the inside wiring installation and maintenance markets, to promote new entry into those markets, . . . and to foster the development of an unregulated, competitive telecommunications marketplace.⁷⁵ These goals have been fully realized, as can be documented by examining the Yellow Pages listings for electrical contractors. For example, in Washington D.C., there are 52 such electrical contractors listed in the Yellow Pages.⁷⁶ This competitive market precludes any argument that inside wire must be unbundled.⁷⁷

⁷⁵ *Detariffing the Installation and Maintenance of Inside Wiring*, 1 FCC Rcd 1190, at & 8 (1986) (*ADetariffing Reconsideration Order*) (subsequent history omitted).

⁷⁶ Electrical Contractor Listings, GTE Super Pages (Internet Yellow Pages) (May 20, 1999) <<http://yp6.superpages.com/listings.phtml?SRC=&STYPE=S&PG=L&C=electrical+contractors&N=&T=&S=DC&R=N&search=Find+It&rtd=yp12.superpages.com>>.

⁷⁷ Further confirming that inside wire does not meet the impair test, the Commission=s rules already promote the competitively-neutral placement of the network demarcation point. *See, e.g., Modifications to the USOA System of Accounts*, CC Docket No. 82-261, 48 Fed. Reg. 50534 (1983) (complex wiring detariffing) (subsequent history omitted); *Detariffing Reconsideration Order*, 1 FCC Rcd 1190; *see also Review of Sections 68.104 and 68.213 of the Commission=s Rules Concerning Connection of Simple Inside Wiring to the Telephone Network*, 5 FCC Rcd. 4686 (1990) (subsequent history omitted). For example, the Commission=s rules applicable to multi-unit buildings (where access issues may be most acute) provide that the demarcation point either be located: (1) in accordance with the ILEC=s reasonable and non-discriminatory standard practices for wiring installed

as of August 13, 1990; or (2) at the minimum point of entry (MPOE) or another point(s) designated by the building owner for installations after that date. *See* 47 C.F.R. § 68.3. Consistent with these rules, GTE's policy is to install the network demarcation point at the MPOE where practical for new installations. GTE also relocates the existing demarcation point(s) in pre-1990 multi-unit buildings to the MPOE: (1) in accordance with any applicable state law requirements; (2) in situations where the wiring undergoes a major modification, addition, or rearrangement; or (3) upon the request of a building owner or another carrier acting on behalf of the property owner.

Third, even if there were a legal basis to mandate unbundling of these facilities, there is no practical basis upon which to require such unbundling. The Commission's decisions establishing a telephone network demarcation point and creating a customer's right to control access to the telephone plant on his or her side of the demarcation point -- the so-called telephone inside wiring -- make clear that ILECs may not use any interest in such wiring to restrict the removal, replacement, rearrangement, or maintenance of inside wiring.⁷⁸ Accordingly, it is the individual customer -- not the ILEC -- that either owns or has the right to grant access to telephone inside wiring and other related facilities on the customer's side of the demarcation point.

VII. TO ENSURE THAT ITS UNBUNDLING REQUIREMENTS CONTINUE TO COMPLY WITH THE COMMANDS OF SECTION 251(d)(2), THE COMMISSION SHOULD SUNSET AND REVISIT THESE REQUIREMENTS IN TWO YEARS.

⁷⁸ *Demarcation Point Reconsideration Order*, 12 FCC Rcd 11897, at & 6.

Finally, the Commission solicited comment in the *Notice of Proposed Rulemaking* on whether it should sunset the unbundling obligations as technology and market conditions evolve over time,⁷⁹ *Second Further NPRM* & 11, recognizing that technological, competitive and economic factors may, over time, affect the availability of network elements from sources outside the incumbent LEC's network,⁸⁰ *id.* & 36. The Commission has, in the past, used sunset provisions repeatedly when changing market conditions threatened to render its rules obsolete or contrary to the commands of the Act. Thus, the Commission recently adopted a provision sunsetting its CMRS structural safeguard rules at a date certain unless the Commission determines that the competitive conditions in the local exchange market are such that continuation of these safeguards is in the public interest.⁸¹ The Commission has likewise

⁷⁹ *Establishment of Competitive Service Safeguards for LEC Provision of CMRS*, Report and Order, W.T. Docket No. 96-162, 12 FCC Rcd 15,668, at & 95 (1997).

adopted sunset provisions when Ait was reasonable to anticipate that,≡ by a certain date, competitors A would have established a . . . presence≡ in new markets.⁸⁰

Likewise, here, the Commission should sunset its unbundling requirements in a reasonable time, such as two years, to guarantee that rapid changes in the telecommunications marketplace do not render the Commission=s rules injurious to competition and therefore in contravention of the Act. Since 1996 alone, the number of CLECs deploying fiber networks used to provide competitive transport and loops has grown from 29 to 60, and the number of cities served by these CLEC networks has grown form 130 to 289. UNE Fact Report at II-6. The deployment of interoffice transport facilities is estimated to grow by an additional *60 percent* between 1996 and 2000. NECI Report at 30. Before the Act was passed in 1996, CLECs operated only 65 switches; since that time, CLECs have deployed 659 additional switches. UNE

⁸⁰ *Cellular Telecommunications Industry Association=s Petition for Forbearance from CMRS Number Portability Obligations*, Memorandum Opinion and Order, CC Docket No. 95-116, 1999 WL 58618, at & 39 (1999); *see also Rules and Policies for Local Multipoint Distribution Services and for Fixed Satellite Services*, Second Report & Order, 12 FCC Rcd 12545, at & 198 (1997) (adopting a three-year sunset for the eligibility restriction of licensing LMDS because a limited restriction would promote competition); *Interconnection and Resale Obligations Pertaining to CMRS*, Second Report and Order, 11 FCC Rcd 9462, at & 32 (1996) (adopting a five-year sunset on roaming regulations because Acellular, broadband PCS and covered SMR services will be substantially competitive within five years≡)

Fact Report at I-1. These facts demonstrate that two or three years of competition can make a tremendous difference in the composition of the marketplace -- and that network elements that may once have been available only from an ILEC can quickly become ubiquitous.

Given the growing deployment of new alternatives to traditional wireline service, this pace of change will only accelerate in the coming years. In the eight representative GTE markets studied by PNR, at least four different companies -- AT&T, Cox Communications, MediaOne (assuming it does not conclude its merger with AT&T), and Time Warner Telecom -- plan to roll out cable-based local service within the next two years. PNR Report at 29, 31, 75. In other parts of the country, numerous cable companies -- including Adelphia, Cablevision, Comcast, and Jones Intercable -- plan to follow suit. UNE Fact Report at III-18-19. Thus, as Congress concluded when adopting the Act, cable-based local service will create Ameaningful facilities based competition≡ for ILEC service, Agiven that cable services are available to more than 95% of United States homes.≡ H.R. Conf. Rep. No. 104-230, at 148 (1996). Likewise, as the price of wireless service continues to fall, there is, in the Commission=s words, Aa greater likelihood that customers will view their wireless phones as a potential substitute for their wireline phones.≡⁸¹ This development is particularly likely in rural markets where the cost of wireless local loops is already far below the cost of deploying traditional wireline loops. Because A42% of all Americans would consider switching their local phone service to wireless,≡ UNE Fact

⁸¹ *Cellular Telecommunication Industry Association=s Petition for Forbearance*, WT Docket No. 98-229, 1999 WL 58618, at & 23 (1999).

Report at III-24, there is little question that wireless service is rapidly becoming a substitute for traditional ILEC-provided local service.

The Supreme Court made clear that the Commission's unbundling rules could not satisfy the requirements of section 251(d)(2) unless they were based on the availability of elements outside the incumbent's network. *Iowa Utils. Bd.*, 119 S. Ct. at 735. The Commission can predict with complete certainty -- based on the last three years of history and the investments CLECs have made in the future -- that the landscape of elements available outside ILEC networks will change dramatically in the next two years. In the same way that the Commission could not base reasonable unbundling rules today on two-year-old data, it should not allow the rules it establishes here to become so stale that they undermine the Act's purpose of promoting competition in the future.

Thus, the Commission's concern that adoption of a sunset provision would constitute forbearance prohibited under section 10(d) of the Act is misplaced. *Second Further NPRM* & 40. It would only constitute forbearance if the Commission declined to impose an unbundling obligation on an element that satisfied the test established in section 251(d)(2). A sunset, coupled with Commission review of the unbundling requirements and promulgation of new rules that comply with section 251(d)(2), would involve no such forbearance. Instead, the Commission would be guaranteeing that *only* the elements that continued to satisfy the Act's unbundling standards remained subject to such obligations.

Rather than being contrary to the Act, a sunset is essential to the success of its pro-competitive enterprise. Unbundling rules that are overbroad -- either when enacted or when rendered so by the passage of time -- deter CLECs from deploying their own facilities, make it more difficult for existing facilities-based CLECs to compete, and discourage ILECs from improving their facilities. To guarantee that its unbundling rules do not dilute these critical incentives to compete -- a result fundamentally at odds within the plain command of section 251(d)(2) and the Act=s pro-competitive purpose -- the Commission should sunset and revisit any unbundling obligations it imposes within two years.

VIII. PROPOSED RULES.

For the foregoing reasons, GTE respectfully suggests that the Commission adopt the following proposed unbundling requirements.

§ 51.319 Specific Unbundling Requirements

- (a) *Elements to be unbundled.* An incumbent LEC shall provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory, unbundled access in accordance with section 251(c)(3) of the Act only to the following network elements:
 - (1) *Local loop.* (i) An incumbent LEC shall unbundle the local loop for use in providing telecommunications service to (A) a business customer with fewer than 20 lines at the location the requesting carrier seeks to serve, or (B) a residential customer who does not live in a building with multiple dwelling units.
 - (ii) Notwithstanding subparagraph (1)(i), an incumbent LEC shall not be required to unbundle a local loop deployed to serve a residential or commercial development that is completed after the effective date of these rules.
 - (iii) The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC and the network interface device at an end user customer premises. An incumbent LEC shall not

be required to condition a loop for a requesting telecommunications carrier in any central office where the incumbent LEC does not provide conditioned loops to itself, an affiliate, or an end user customer.

- (2) *Transport.* (i) An incumbent LEC shall unbundle interoffice transport to or from any wire center with fewer than 15,000 lines.
- (ii) Where unbundling is required, the transport element shall include: (A) dedicated transport, defined as incumbent LEC transmission facilities dedicated to a particular customer or carrier that provide telecommunications between wire centers owned by incumbent LECs or requesting telecommunications carriers, or between switches owned by incumbent LECs or requesting telecommunications carriers; and (B) shared transport, defined as transmission facilities shared by more than one carrier, including the incumbent LEC, between end office switches, between end offices switches and tandem switches, and between tandem switches, in the incumbent LEC=s network.
- (iii) Where unbundling is required, the incumbent LEC shall: (A) Provide a requesting telecommunications carrier exclusive use of dedicated transport facilities, or use of the features, functions, and capabilities of shared transport facilities; (B) Permit, to the extent technically feasible, a requesting telecommunications carrier to connect such interoffice facilities to equipment designated by the requesting telecommunications carrier, including, but not limited to, the requesting telecommunications carrier=s collocated facilities; and (C) Permit, to the extent technically feasible, a requesting telecommunications carrier to obtain the functionality provided by the incumbent LEC=s digital cross-connect systems in the same manner that the incumbent LEC provides such functionality to interexchange carriers.
- (3) *Wholesale operations support systems functions.* An incumbent LEC shall provide unbundled access to operations support system functions to a requesting telecommunications carrier in connection with the unbundled provision of another network element from the incumbent LEC or the wholesale provision the incumbent LEC=s local exchange services. Operations support systems functions consist of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC=s databases and information.
- (b) *Proprietary features, functions, or capabilities of elements.* Access under this rule to a proprietary feature, function, or capability of a network element otherwise required to be unbundled shall be available only where such proprietary feature, function, or capability is integral to the operation of the network element such that

a requesting telecommunications carrier cannot make use of the network element without such access.

- (c) *No state expansion of unbundling requirement.* No state shall require an incumbent LEC to provide unbundled access to any element not identified in subsection (a).
- (c) *Sunset.* The requirement to provide unbundled access to an element identified in subsection (a) shall expire two years after the effective date of this rule unless the Commission finds that continued access to that element of the incumbent LEC=s network is essential to enable a requesting telecommunications carrier to compete effectively against the incumbent LEC in the local exchange market. Upon sunset of the requirement to provide unbundled access to an element, an ILEC shall no longer be required to offer unbundled access to that element, notwithstanding any provision in an effective section 252 interconnection agreement that otherwise would compel such access.
- (e) *Effect of Section 252(i).* A telecommunications carrier may not use section 252(i) to obtain access to any unbundled network element unless that element is listed in subsection (a).

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